

University of North Carolina School of Medicine

Vol. 21 Winter Issue

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THE NORTH CAROLINA MEMORIAL HOSPITAL
1700 VETERANS BLVD.
CHapel Hill, N.C. 27514

The Bulletin starts the second year of its new format with the 10th issue. It is starting, also, with a new editor, Mrs. Katherine Lewis. Mrs. Lewis is a UNC graduate and a veteran of the highly regarded publishing course sponsored by Radcliffe College. She has been editorial associate of The Bulletin for the past three years and has had previous editorial experience.

She is imaginative, thorough and interested. If you fulfill our responsibility as readers - letting her know what you like and what you'd like to read - the magazine will grow.

The Bulletin is minus a member of the editorial board, Dr. Nathan Womack, whose contributions are described elsewhere. Dr. Womack served with Dr. William Blythe and the Dean on the manuscript board.

It should be noted that Dr. Blythe was highly regarded - both professionally and editorially - by his colleague, Dr. Womack. One day, when Dr. Blythe caught a point in a manuscript that Dr. Womack had missed, Dr. Womack observed, "That youngster is one of the few that can spell and write a proper sentence." (The youngster is a member of the Class of 1951.)

The former editor of The Bulletin is going underground. Moving to Charlotte and taking a new name (legally). It has been a pleasure editing The Bulletin for the first year, and the editor is grateful for the privilege.

-- C. B.



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University of North Carolina School of Medicine

Bulletin: Vol. 21 Winter Issue

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Nathan Anthony Womack

Nathan Anthony Womack, first Chairman of the Department of Surgery, died February 2 in Chapel Hill. The 73-year-old physician was active until the time of his death in teaching and research.

A Kenan Professor of Surgery, he was a member or honorary member of more than 50 professional associations and societies and had published more than 100 scientific articles.

Dr. Womack was considered a national leader in the field of medical education. He was past president of the National Board of Medical Examiners and remained a member of its Executive Board.

Dr. William C. Friday, President of the University of North Carolina, said: "The quality of his leadership at Chapel Hill was a main thrust in the transition of the University's medical school to its present stature."

Dr. Christopher C. Fordham, III, Dean of the UNC School of Medicine, noted: "The fields of medical education and surgery have lost a great leader. His contributions to this School are reflected in the excellence of the School's clinical program today."

Dr. Womack's successor, Dr. Colin G. Thomas, said that during Dr. Womack's tenure as chairman of the department, "The faculty educated

two departmental chairmen, six divisional chairmen, 28 surgeons who accepted full-time academic appointments at other universities, 60 who entered private practice in North Carolina and 28 who established practices in other parts of the U.S. Still others went into the military, and one became head of the Thomas A. Dooley Foundation."

Dr. Thomas characterized him as "always a provocative teacher, an imaginative and critical thinker. Dr. Womack was the epitome of an academic surgeon."

Upon his retirement as chairman in 1968, the Womack Surgical Society was formed in his honor. Its stated goals were to meet every two years for a scientific program in Chapel Hill and to award a scholarship to the senior surgical resident whose qualities represented the "general excellence" demonstrated by Dr. Womack in general patient care, teaching and research. The third meeting was held nine days before his death and attracted more than 200 persons to honor Dr. Womack.

He had received distinguished service awards from both alma maters: the University of North Carolina and Washington University. The UNC School of Medicine gave him its Distinguished Service Award in

1974, an honor rarely given faculty members. He received the Distinguished Alumni Citation from Washington University in 1967.

He served on numerous editorial boards, including the University of North Carolina Press, the *Annals of Surgery* and *The American Surgeon*.

After being graduated from UNC, Dr. Womack completed his medical education and specialty training at Washington University where he subsequently held his first academic appointment. In 1948 he left there to become Chairman of the Department of Surgery at the University of Iowa. In 1951, when UNC recognized a 60-year-old dream and became a degree-granting school, Dr. Womack returned to become first chairman of the surgery department.

Dr. Womack once told a respondent young surgeon: "Good doctors always worry about their patients, but you can't let them know it. Always have something else to do."

The man who always had "one more thing to do" is survived by his widow, Mrs. Margaret Richardson Womack; a son, James Anthony Womack of New York, and a daughter, Mrs. Thomas A. Hruska of Marquette, Michigan.



Dr. Nathan A. Womack was a nationally and internationally known teacher, surgeon and author. His keen intelligence and readiness to help colleagues made him a neighbor to many he never saw.

But Dr. Womack made another contribution - - small when compared to his career as a whole but special to the readers of *The Bulletin*.

When *The Bulletin* was revised, made into a quarterly magazine and sent out to alumni, only a handful knew how many hours Nathan Womack gave the editor. He read every manuscript with a sharp eye. When an issue was planned, he could come up with so many ideas that one only wished *The Bulletin* were a weekly. And he never believed in thinking small. He wanted it to be a respected scientific journal as well as your alumni magazine.

When we dryly pointed out that we did not quite possess the prestige of the *New England Journal of Medicine* and therefore

would hardly have bright young scientists pressing original works into our eager editorial hands, he grinned and said, "But we will, we will!"

The trouble was, he was believable. Somehow, while the budget was small, and the paper was not slick (a sore point with him always), it seemed that with a spirit like his, *The Bulletin* could produce relevant articles that made a difference in the way our alumni practiced medicine.

Nathan Anthony Womack was the kind of editor every writer hopes for. He took care with each word; he was never arrogant enough to superimpose his ideas on another. And he believed the only publication worthy of being on paper (even newsprint grade) had to be written in proper grammatical form, with the philosophical chips falling where they may. "If it is to be believed, every side must be heard."

He longed for criticism. "We're not first rate yet. Not enough complaints," he growled.

He was not a journalist by profession, yet many could have learned much from the editorial integrity he possessed.

His standards were the highest. He refused to do something well when it could be done better. The thing we remember best about Dr. Womack, however, was how much fun he had while doing a good job. His small scrawls and his suggestions made *The Bulletin*. We are grateful he shared his time with us and you, the readers.

... C. B.

From Circuit Courses to “Atop Terrel’s Mountain”

A Conversation with
William P. Richardson, M.D.

How did you become interested in continuing education?

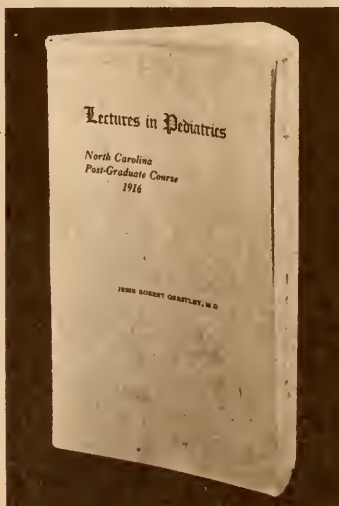
When I came to the medical school in 1952, I was asked to take over continuing education. The program was already underway and had been for a good many years. It was operated through the Extension Division, and I was asked to take it over because it was assumed -- and it turned out -- that we would try to do a somewhat more extensive job than making three or four and occasionally six points in the state for these extension courses each year. So that was the way I initially developed a special interest in continuing education. It turned out to be a very pleasant association, and I have cherished the opportunity to get to know so many doctors in the state and to work with them in planning the programs. **Were the extension programs an outgrowth of the circuit courses?**

They were really a continuation of the circuit courses, but the format had changed to some extent. The original ones were in pediatrics and, I believe, OB-GYN the first summer or

two. When they were renewed after the first World War, they continued on that basis, but later on they became mixed programs. That is, we had one speaker for one session, and the next week we had another speaker.

When the circuit courses were inaugurated in 1916, the idea was innovative. Do you know if this caused any controversy?

No, I don't think so. There was one thing that struck me particularly in the accounts of their organization: the average



doctor in North Carolina was making \$1,000 to \$1,800 a year. Such income made it impossible for doctors to get away to centers where courses were being held, so the University's program was very enthusiastically received. It is still quoted as one of the pioneer programs. I don't like to put too much emphasis on "firsts," but this was certainly the first effort on a statewide basis to take continuing education to the doctor in or near his home community.

One of the most influential programs in the early days was the Southern Pediatric Seminar. Did you have any connection with it after you came here?

My relationship with the group that was operating it came in a little different context. They originally had only pediatrics, and then they developed a week of obstetrics and gynecology. When I came to know them, they had a week of pediatrics, a week of obstetrics and gynecology and a week of general medicine. The facilities were at Saluda, and the organizers had to bring together a staff to feed and take care of a fairly large group of people. This was rather difficult when they were using the facilities and staff for only three weeks. So, they were trying to get the co-operation of other groups who would put on programs to extend this. We for a number of years did go up there after their third week of an annual institute on tuberculosis, which had originally been held at Chapel Hill. It was sponsored by the Tuberculosis Association, the

State Board of Health, the sanatorium system, the School of Medicine and the School of Social Work of the University. This is still going on, but we've moved to Blue Ridge in more recent years.

Why was the Southern Pediatric Seminar discontinued?

I think it was like so many of the programs -- including our extension courses. Opportunities began to multiply with the three medical schools each sponsoring some programs and many of the medical groups in the state presenting programs. There have been so many different things that as large a number of doctors have not attended any given program as in earlier years. The attendance got to the point that it wasn't profitable to continue the Seminar.

I know this kind of fragmentation came about in the 50's when specialties came into their own. Could you tell me about the kinds of programs that we developed because of increasing specialization?

As long as there was very little specialization, it was not much trouble to pick out some area and get a program that was of interest to doctors across the board. But as specialization progressed, we were always torn between the need to cover a particular subject in depth, which would inevitably narrow the number of people who would be interested in it, or having something more general that was really to some extent cosmetic more than educational but would draw a lot of people. We

sort of alternated back and forth.

We did, however, begin immediately to have programs here. Our first program was in March of 1953. We were trying to give a broad representation in the program to our new faculty because we wanted them to meet the doctors, and the doctors wanted to get acquainted with them. The program was entitled "Diagnostic and Therapeutic Techniques Applicable to Office Practice." You couldn't cover anything much broader than that, and we did have a tremendous number of people. In the beginning we had a program every year, and those the following two or three years were likewise fairly general.

Beginning in the fall of 1957 we had what was called the Annual School of Medicine Symposium. This was our effort to present the best program of the year that had not necessarily broad coverage but at least broad enough to interest a larger group of doctors than one of the specialized subjects. We also tried to have the very best people we could get, locally and otherwise. **Could you tell me a little more about the program on office practice?**

It related to things like bacterial and chemical tests, as well as clinical tests, that can be done simply in the office without taking the patient to the hospital. It also covered the kinds of treatment procedures that were applicable in the office as opposed to the hospital. There are a good many things that can be done in the office if the doctor has a little equipment and imagination.

The School of Medicine sponsored a radio show in the 60's. Could you tell me how this idea originated and describe how the programs were set up?

The idea originated with Dr. Frank Woolsey, who was director of continuing education at Albany Medical College in New York. Dr. Woolsey was a graduate of Duke, incidentally. He is an ardent electronics and radio ham -- electronics in addition to radio because he goes in for electronically guided model planes. He conceived of the idea, and it was set up in his area originally as a ham radio operation. They got ham operators in each of the communities, and that provided the two-way feature. I think he used his own ham radio station initially though soon they obtained a medical school station, much as we had our FM station here in Chapel Hill. I heard about it and became interested in it.

We got an annual grant from Merck, Sharp and Dohme, which was sufficient to pay off the capital outlay of \$23,000 necessary to move the radio from Swain Hall to "atop Terrel's Mountain," as the announcer was wont to say. WDNC donated the microwave unit that was set up in Swain Hall. We decided not to do it on a ham basis, though there are a good many medical hams around the state, but to go the telephone route. We had really a tremendous amount of interest and cooperation on the part of the telephone people, and we had a right sophisticated setup. The doctors listening to the show could push one button

to turn the reception off and ask us questions, and they could push another button to light up a light on our panel and let us know they had a question. I'm no electronics expert by any means, but I was intrigued by all this gadgetry and how well it seemed to work.

It seemed to me to be an ideal setup. All the doctors had to do was take the time out at the hour the majority of them had selected, get together in their room and have a moderator who would handle the equipment and pass on the questions. Initially it went off great guns. I had sort of thought this might diminish the

demands for the extension courses, but it didn't. The people who had the radio units still wanted the annual programs.

Gradually the response to the programs began to wear off. I think it was partly the newness wearing off and partly the competition of other things and the development of new means of education. I think Dr. Woolsey is still carrying his on, though.

For two years we were putting on television programs. We exchanged tapes with other places. There were a number of places -- both in this country and Canada -- that were developing programs. South Carolina originally set up an educational

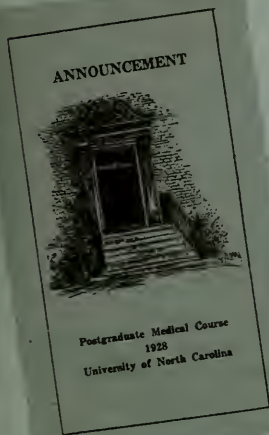
television network directed at the schools. They were able to get extensions of these lines -- this was done by cable -- into the hospitals. They had a pretty sophisticated program.

We developed four or five programs of our own each year, and we would fill in the other weeks with programs from other places, which some of us would introduce. The problem with that was that we didn't have the two-way feature. We frequently set up a phone system so that doctors in the state could call in, but there was no group meeting as there was for the radio program. It was also difficult to find a time that did not conflict with the television network's programming and was agreeable to the doctors. You have no idea how difficult it is to find a time for doctors, because there are those who get started as early as 7:00 or 7:30 in the morning at the hospital. You'd think that would be a time you could do your program, but the surgeons are getting started on their operations then. Some of the other groups of doctors might be running until 6:00 when we could get air time from 5:00 until 6:00. It was finally given up, but we did have some real good programs, and some of the ones we produced I thought were as good as anyone else's.

Several members of the faculty have put together a "road show" that they take to various communities across the state. When you were involved with continuing education, were there any similar programs developed by faculty members?



The only program that we ourselves developed and sponsored was on the cytology for pap tests for cancer. We had three teams -- from here, from Duke and from Bowman Gray -- and we sent them out to a number of communities explaining and popularizing this. There were, I think, some other things



of this kind done, though not necessarily through us.

There was one program that I would like to mention that I was very enthusiastic about. We were invited by a medical group at Salisbury to send them a specialist whom they had selected. He would go up once a week in the afternoon to see any patients they wanted him to see or to review cases that one of more of the local physicians would present. Then we would have a before-dinner presentation by this same doctor.

I went up to every one of these sessions. I thought it was a most successful series, but we weren't invited to continue it. The only reason I could find was that there were in that community -- and I think this would be true in other communities -- a limited number of doctors who were willing to get up and present one or more of their patients before a group of their peers and before the "expert" from the medical center, for fear that they would be asked about tests they hadn't done and that their shortcomings -- or perhaps a better term would be shortcuts -- would be held up. Our people who went down were very conscious of this, and as far as I know there was no single instance where they embarrassed the person by doing this. So far as I was concerned it went off very well.

One of the first programs they asked for was for an anesthesiologist. They did not have an anesthesiologist or a nurse trained for anesthesia. The doctors gave anesthesia for each other, or the generalist gave it for the surgeons for their operations. It was quite a problem, and Dr. David Davis, who was head of anesthesiology at the time, volunteered to give the program. We went up in the morning because we wanted to get there while they were operating to see what was going on, how they were set up and how it went. Then the doctors talked with Dr. Davis in the afternoon and presented their problems and their experiences

and so forth. Then in the evening he gave a talk on some specialized aspect of anesthesiology. As I say, I was very enthusiastic about it, but we never got invited back to do that, and I was never able to sell it to other groups.

We were always trying to do something to get out of the rut, and I think that with all the enthusiasm and interest that at least some of the doctors had for continuing education, they liked to take it in as painless a form as possible. They were just a little hesitant about things we tried to develop that involved more active participation on their part.

We've talked a lot about programs you took to the physicians. What programs did we have here, and was there much participation?

I mentioned the program we had that evolved into the annual symposium. For quite a number of years we had programs each year in two other areas in cooperation with Medical Society committees. One was in occupational medicine and health, and the other was in athletic injuries. Gradually as departments or individuals within departments had funds and grants that would enable them to put on programs, we began to develop other specialized programs. This has increased over the years, and I think constitutes now perhaps the larger number of the programs that are held here.

We've had a number of programs on cancer, as you know, including the one we had last year. We have also put on

special programs in one or another area of cardiology. This is always a field that has broad interest, though the year that we got down to pediatric cardiology and included catheterization of the various chambers of the heart and measurement of the systolic and diastolic pressure in each chamber, we lost some of the generalists who had come.

There was one other aspect that I think needs to be mentioned. Starting before late '69 and '70, the Academy of General Practice sponsored a very fine annual program. One year they would ask us to put it on for them, the next year Duke, another year Bowman Gray and sometimes combinations. In late '69, when their first board examinations were coming up, they asked the three schools to put on a series -- I think it was a total of about twelve Sunday programs. They started at 9:00 in the morning and ran until 5:00 in the afternoon. Of course there was a real motivation in back of it, but I have never been involved in anything that had as much enthusiastic participation as that did. Those doctors were there from far ends of the state at the opening session. They stayed until the session was over in the afternoon, they took notes, and they asked questions more extensively than other groups. We've tried various schemes to encourage participation and questions from the floor, but you didn't have to stimulate that group.

I want to mention the two series that to me were particularly interesting. They were

the Morganton group and the group in the First District, which includes Elizabeth City, Edenton, Ahoskie and that whole series of northeastern counties. The longest unbroken series we had was in Morganton. This was over the years the most successful, and I think a great deal of the credit goes to Dr. W. H. Kibler, who was the most effective organizer of the pre-planning program. At this meeting representatives of all the groups discussed the programs they would particularly like to have and suggested speakers they would like to hear. He always had the best representation and the best programs, and one of the secrets may have been that we always met at the little community club in Morganton. The lady who ran the food end of that was the best picker-out of steaks I've ever seen. I've never been any place and had steaks that could come up to those that she served. So you could get a successful planning meeting.

He also got somebody from each of the participating counties to preside at each session and did all sorts of things to involve the people who were coming. Often we would go from one community to another over a period of three years, and the people in whose community you had it would come one year and the other people would come other years. Dr. Kibler had the best general attendance of any of the programs that we had.

The other next longest unbroken series was the First District. I think this relates to its unique nature. Since the

communities are small and the doctors are spread out over a wide area, the programs gave them a chance to come together. That element made this one a successful series. One of the people who was very prominent in planning and supporting that over the years was Dr. John Payne, who is the father of our John Payne here at the medical school. Dr. Payne also used to take it as his special responsibility to try to get the visiting speaker drunk at the social hour, but I know of only one case where he was so successful that the evening session was very unfocused.

I would also like to mention one speaker that we had over a great many years who was a very unusual and remarkable fellow -- Dr. Louis Krause, who was affiliated with the University of Maryland medical school. He was an internist in Baltimore, an ordained Lutheran minister and a bachelor. He spent a good part of his summers in archaeological work, particularly in the Middle East and the Holy Land.

He talked on a variety of subjects, as did most of the speakers we had, but there were two very frequently requested. One was "Medicine in the Bible." The other was a most remarkable discussion of the physical examination. He started with the hair, the eyebrows, and the skin of the face and came on down, noting all of the superficial things that you might miss as well as the more obvious ones. For instance, sparse eyebrows could tell you about certain endocrine functions and that sort



of thing. This was a tremendously popular address.

Since he would never fly, he always came down on the train. I think the last time he came down the trains were no longer running, and he had the most arduous bus trip you can imagine. I don't know how he got to the Middle East without flying, but maybe that's different.

Why do you think a community-based continuing education program is important?

It was always good, I thought, for doctors from medical centers -- whether it was ours or another one -- to see the doctors in their own communities with their own problems,

which are different from the ones you see in a big referral center. Before we went to four years, it was nearly all visiting speakers, though we did have people from Duke and, less frequently, people from the two-year faculty at Bowman Gray. They enjoyed it, and we didn't have much trouble getting participation. We tended to count on our own graduates -- from the two-year school or at least UNC -- to carry the ball in a special way for it. I was always interested in how often it was a Duke man or a Bowman Gray man who would really put the steam behind it in the local community, so that it was not in any sense a parochial undertaking.

We feel that the programs really accomplished something, but I don't credit all of that to the programs. Part of it was the kind of participation, and this is the thing that I think is so important as we move into the area where the AHEC Program is going to be involved in education in the local community. When you have good participation from the people involved, the education is most effective. This is the thing we have worked on, but it has taken a long time to get it to that point.

Editor's Note: Dr. Richardson was Assistant Dean for Continuation Education from 1952 until 1970.

AHEC's Physician-Teachers

by Eugene S. Mayer, M. D.

"Can the UNC School of Medicine help us improve our continuing education? Although your 'circuit-riding' lecture courses have always been helpful, their value is limited in that they take place for only six weeks each year, often do not cover topics of highest priority to our physicians and are limited to the lecture format. We are going to try something different at our hospital by organizing our own weekly continuing education programs for physicians and support personnel. Although we plan to conduct most of the sessions ourselves, we would like to broaden our view with outside experts every four weeks. Can the medical school help us in any way?"

These essentially were the words I heard from Dr. Avery McMurry when Dr. W. Reece Berryhill and I visited the Cleveland Memorial Hospital in Shelby during August 1971 to discuss the organization of the medical school's continuing education lecture series for 1971-72. I had only been in North Carolina for one month at that time and was uncertain whether I should be discouraged or challenged by Dr. McMurry's comments. Dr. Berryhill was only challenged by the visit and

commented, "The time has come for the medical school to help physicians develop a totally new approach to continuing education. It should, in the first instance, be one which serves the clinical needs of the practitioners. It should involve the practitioner as teacher of his colleagues using his own patient care problems as a stimulus. Finally, the medical school faculty should provide assistance in the organization and evaluation of the programs and should participate directly as teachers in the community on selected occasions."

Since August 1971, a lot has happened in continuing medical education in Shelby. Most of the accomplishments have resulted from the organizational efforts and the teaching activities of the medical staff of the Cleveland Memorial Hospital. Some of the accomplishments relate to the partnership which has developed between the Cleveland Memorial Hospital and the Charlotte Area Health Education Center (AHEC). This partnership between a community hospital and the AHEC Program is one which has many potential lessons for communities throughout our state.

The AHEC Program of the University of North Carolina was born in October 1972, when the UNC School of Medicine received a five year \$8.5 million federal contract to develop three AHEC's in North Carolina and to plan for a network of six additional AHEC's to serve the entire state. This federal contract built upon the limited efforts of the School of Medicine during the late 1960's and early 1970's to relate medical education to selected affiliated community hospitals. The federal contract, in turn, then served as a catalyst for the development of a state-wide plan for medical education by the Board of Governors of the University of North Carolina. This statewide plan was eventually submitted to the General Assembly, and in April 1974, an appropriation of \$28.5 million was made by the General Assembly for the further development and support of a statewide program. The North Carolina AHEC Program is directed by Mr. Glenn Wilson, Associate Dean in the UNC School of Medicine at Chapel Hill.

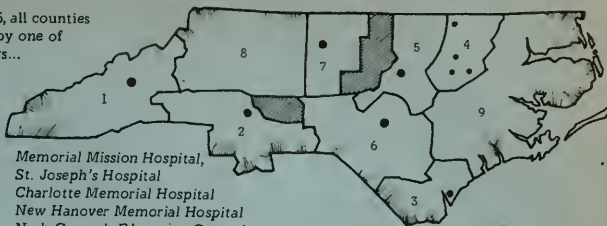
In North Carolina an AHEC is a community hospital, or a consortium of hospitals, which is already serving as a regional

referral center and which has the interest and capability to become a regional education center for the training of health manpower of all types. As such, an AHEC engages in undergraduate, graduate and continuing education for a variety of types of health manpower. In medical education this means receiving medical students on rotation, training interns and residents and meeting the continuing education needs of practicing physicians. To assure the development of such programs each hospital must agree to have between six and ten full-time medical faculty and to make some financial contribution to the total program. In other health manpower areas an AHEC must arrange field training for University students in pharmacy, dentistry, public health, nursing and allied health. It also agrees to develop or augment, if necessary, local educational programs for nursing and allied health students in association with local colleges, community colleges and technical institutes. AHEC programs are complementary to existing educational programs in the communities of the state and make maximal use of the existing clinical training resources of community hospitals, health departments, health agencies, practitioners' offices, etc. Finally, each AHEC must agree to serve the health manpower development needs of an entire region of the state and must specifically indicate the counties with which it will work (see map).

The basic purpose of the AHEC Program is to maximize the relationship between the edu-

Counties served by the North Carolina Area Health Education Centers Program as of November 1, 1974.

by June 1, 1975, all counties will be served by one of the nine centers...

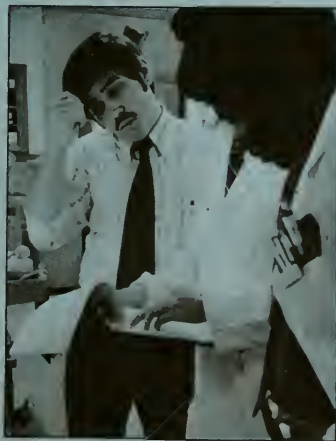


1. Asheville: Memorial Mission Hospital, St. Joseph's Hospital
2. Charlotte: Charlotte Memorial Hospital
3. Wilmington: New Hanover Memorial Hospital
4. Area L: Nash General, Edgecombe General, Wilson Memorial, and Halifax Memorial Hospital
5. Raleigh: Wake Memorial Hospital
6. Fayetteville: Cumberland County Hospital System, Womack Army Hospital (Fort Bragg), Veterans Administration Hospital

7. Greensboro: Moses Cone Hospital
8. Northwest: AHEC site being determined in cooperation with Bowman Gray School of Medicine
9. East: AHEC site being determined

AHEC affiliation of cross-hatched counties not yet determined.

cation process and the specialty distribution, geographic distribution and quality of health manpower in North Carolina. At the UNC School of Medicine, we expect this may be our last opportunity to influence the geographic and specialty distribution of physicians through voluntary means, and we believe that our experience to date with the AHEC Program suggests that we can be reasonably optimistic about the outcomes of the statewide program.



To influence specialty re-distribution, the medical school and the AHEC's must provide substantially increased training opportunities in primary care, especially in family medicine. A firm commitment and a plan of action have already been put into effect. Specifically, the AHEC Program will allow for the development of 300 new primary care residency positions in North Carolina by 1980. Of these, 150-180 will be in family practice. In addition, the AHEC Program has afforded the medical school a vehicle for implementing a newly required program in family medicine for all fourth year medical students.

In order to improve the geographic distribution of physicians, the AHEC Program is focusing upon at least two concerns. The program is trying to develop meaningful clinical education opportunities in community settings for medical students and house staff. Through such exposure physicians in training can observe the excitement and challenge of community practice.

Toward this end, the enrollment of the UNC School of Medicine at Chapel Hill will expand from the 140 third and fourth year students of 1970 to 320 third and fourth year students by the early 1980's. At the same time, community-based training through the AHEC Program will increase from 10% of the clinical education of third and fourth year students in 1974 to 33% of the clinical education of third and fourth year students in 1980. In other words, about 100 third and fourth year medical students will be receiving clinical training away from Chapel Hill at any given time in 1980.

The second focus of the AHEC Program which relates to improving the geographic distribution of physicians is the development of a professional environment in North Carolina that would enhance both the recruitment and the retention of physicians. This development relies heavily on the regional manpower training programs of the nine AHEC's, which focus on the full range of health manpower needs to make an area attractive to a physician. An additional ingredient in the development of this professional environment and in the reduction of professional isolation is the creation and maintenance of high quality, clinically relevant and locally accessible programs of continuing medical education.

A major goal of these continuing education programs is the maintenance of the quality of the practitioners in North



Carolina by helping them translate new knowledge into the care of their patients. This is a major focus of the AHEC Program.

Continuing education can come in a variety of forms. We believe a physician enhances his or her practice to the degree that he or she participates in several forms of continuing education. AHEC's provide opportunities for private practitioners to teach medical students, interns and residents in community hospitals or in office settings. Private practitioners are also exposed to medical faculty from the various specialties who travel to communities for consultation clinics on a regularly scheduled basis. In addition, private practitioners may act as both "teachers and students" in a variety of lectures, clinical case conferences, workshops, etc., at the AHEC's and in local communities.

"Teaching medical students and house staff is the best form of continuing education that I know of for the private practitioner," says Dr. Bryant Galusha, Director of the Charlotte AHEC. To teach effectively a physician must keep up to date with the medical literature and discuss changing approaches to patient care with his colleagues in the community and on the full-time medical faculty of the AHEC's. Students and house staff have an insatiable desire to learn more. Their questions are a direct stimulus to continuing education as any teacher well knows who, on too many occasions, has said, "I can't answer that question."

In addition to being kept up to date by students and house staff, the practitioner-teacher has the opportunity to participate in the full range of conferences, grand rounds, seminars, etc., that are provided by the full-time medical faculty for students and house staff in the AHEC areas.

As noted, the AHEC Program has made a major commitment to community-based training for medical students and house staff in hospitals and practitioners' offices throughout North Carolina. By 1980 practitioners throughout the state will have an opportunity to participate regularly in these programs if they desire and if they are prepared to devote the time needed for the proper supervision of their "students" and therefore for their own continuing education.

There are now many pro-

grams underway for teaching medical students and house staff in the AHEC network. Each of these programs provides continuing education opportunities for many practicing physicians in North Carolina. In support of these activities there are 30 full-time medical faculty in the AHEC settings. This number will increase to over 80 faculty by 1980. In addition, at least 10% of the private practitioners participated as teachers in these programs during 1974 and thereby enhanced their own efforts to keep up to date in their medical practice. Medical student and house staff training activities through the AHEC Program include:

1. Second year physical diagnosis: This training occurs at the AHEC's in Greensboro and Raleigh.
2. Third year clinical clerkships: These occur regularly at the AHEC's in Wilmington, Charlotte and Raleigh.
3. Fourth year acting internships: During 1974 these took place at the AHEC's in Wilmington, Raleigh, Area L, Greensboro and Asheville.
4. Fourth year family medicine rotations: Beginning in June 1975 all fourth year students will take a one-month rotation in family medicine. These activities will be conducted both at the Family Practice Centers in the various AHEC's and in practitioners' offices in towns surrounding the AHEC's.
5. Non-clinical community medicine electives: These occur throughout the state for interested medical students.

6. AHEC-based house staff training: Several of the AHEC's have their own house staff training programs. These are in Charlotte, Wilmington and Greensboro. In each case these residencies pre-dated the AHEC Program and were developed by the medical staffs of the Charlotte Memorial Hospital, the New Hanover Memorial Hospital and the Moses Cone Memorial Hospital. However, the resources of the AHEC Program have allowed for augmentation and expansion of these existing programs. By 1980 all nine AHEC's will be actively involved in the training of family practice residents, and most of the AHEC's will also be training residents in other primary care fields.
7. Rotation of house staff from the medical school of the AHEC's: Although this program will always represent but a small part of the total AHEC effort in house

staff training, it does provide several exciting training opportunities. For example, residents in family practice, internal medicine, pediatrics, obstetrics-gynecology, surgery and psychiatry receive some portion of their training in the Raleigh AHEC. In addition there is always a senior obstetrics-gynecology resident and a first year family practice resident receiving training in obstetrics-gynecology in Rocky Mount through the Area L AHEC. Residents in internal medicine, pediatrics, obstetrics-gynecology, family practice, surgery, and psychiatry can also choose a variety of elective opportunities which offer some training in most of the AHEC's in North Carolina. During 1974-75 there were several months of elective rotations in the New Hanover Memorial Hospital by senior internal medicine residents from the medical school.

One of the reasons given for the importance of group practice arrangements is the immediate accessibility of each physician in the group to the consultative advice of a colleague. This not only improves the process of patient care but also provides a clinically relevant method of continuing education for the physician. In North Carolina a substantial proportion of physicians continue to practice in situations which do not provide immediate access to colleagues in specialty fields. In fact, in many areas of our state there is a lack of specialists in addition to a shortage of primary care physicians.

In several communities the



private physicians have requested the development of specialty consultation clinics conducted by faculty from the School of Medicine at Chapel Hill. The AHEC Program has assisted in the development of these clinics and now offers a potential for AHEC-based faculty to complement medical school-based faculty in conducting such consultation clinics in smaller towns surrounding the AHEC's.

During 1974 approximately 8,000 direct patient consultations were provided in the towns of North Carolina by the medical school faculty and a senior resident through the AHEC Program. Since these clinics encourage the referring physician to interact directly with the faculty consultant, they also offer an excellent forum for continuing education. Selected examples of these consultation clinics include:

1. Otolaryngology: Bi-monthly clinics are being conducted in Morganton, Clinton and Tarboro.
2. Neurology: A clinic is held monthly in Rocky Mount.

3. Pediatrics: Monthly consultation clinics in cardiology are being conducted in Wilmington and Rutherfordton. There is also a monthly hematology clinic in Wilmington.

4. Dermatology: A weekly consultation clinic has recently been developed in Fayetteville, and another will soon begin in Charlotte in association with the family practice residency.

5. Orthopaedics: Monthly consultation clinics are underway in Tarboro, Elizabeth City, Edenton and Jacksonville.

6. Psychiatry: Regular mental health clinics are being conducted in a variety of towns in the state.

7. Radiotherapy: Consultation clinics are held monthly in Rocky Mount and Tarboro, and one is planned for Roanoke Rapids.

8. Obstetrics-Gynecology: A monthly clinic in oncology takes place in Wilmington, and a gynecology clinic is being conducted in Clinton.

Dr. Lockert Mason, chief of the surgical teaching service at the Wilmington AHEC, notes, "These consultation clinics are

an excellent vehicle for continuing education and occasionally prove that significant volume exists in a community to support a private physician in the specialty, thus often becoming an indirect form of physician recruitment." In Wilmington this occurred for pediatric allergy. Most recently the orthopaedic consultation clinic in Rocky Mount was phased out when an orthopaedist moved there.

Educational activities conducted through lectures, case conferences, workshops, etc., are undoubtedly the form of continuing education which comes first to the minds of physicians when they ask the medical school to assist them in keeping up with new knowledge. Although the preceding sections have outlined less commonly considered forms of continuing education, the more traditional activities continue to be an important dimension of the total AHEC Program, which offers the opportunity for such continuing education courses to be conducted both at the AHEC's and in surrounding community hospitals. In all cases the programs are made available to all practicing physicians in the geographic region.

The activities of the medical school faculty in such programs are organized through the office of Dr. Oscar Sapp, Associate Dean for Continuing Education. The continuing education activities of AHEC-based faculty are organized through the offices of the various AHEC directors.

In addition, several departments of the School of Medicine



offer opportunities for both AHEC-based faculty and community practitioners to come to the medical school on a regular basis to participate in conferences, grand rounds, lectures, etc. As an example, the Department of Obstetrics-Gynecology has practitioners from several towns spend each Wednesday in Chapel Hill increasing their knowledge of new concepts in their specialty.

Although the variety of the more traditional continuing education programs in the AHEC network is too great to catalogue in this article, the activities of the medical staff of the Cleveland Memorial Hospital in Shelby, mentioned earlier, have many implications for other communities in the state. Although these physicians desired a regularly scheduled continuing education program related to the medical school and the Charlotte AHEC, they recognized that they would gain the most from such activities if they put something of themselves into the program. Consequently they identified one of their number, Dr. Dorothy

McMurray, to serve as a half-time coordinator of continuing education. Funds to support Dr. McMurray's activities were obtained first from the North Carolina Regional Medical Program and subsequently from the Charlotte AHEC.

The Shelby physicians map out their own program of continuing education several months in advance and then arrange for various speakers to lead the weekly discussions. About half of the discussions are led directly by physicians from the county. The remaining sessions are conducted by outside consultants, including faculty from the Charlotte AHEC and the School of Medicine at Chapel Hill.

This program has now been made available to physicians from surrounding towns and counties, and -- in effect -- Shelby has become a subcenter for continuing medical education within the Charlotte AHEC. In addition, various support personnel often participate in these sessions, thus providing an important example of interdisciplinary opportunities

in continuing education.

The preceding summary of continuing medical education activities in North Carolina made possible through the interests and activities of community practitioners, AHEC-based faculty and medical school faculty only scratches the surface of the opportunities that can be made available to physicians and other health personnel in North Carolina through the statewide AHEC network. As we work to fulfill these potentials in North Carolina there are several activities which come to mind as future challenges.

The North Carolina Medical Society recently adopted a requirement stating that each physician must have 150 hours of "approved" continuing education every three years in order to maintain membership in the Society. Since all AHEC sponsored continuing education activities are directly or indirectly under the supervision of the medical school, the AHEC network offers a ready-made mechanism for developing continued education programs accessible to the practitioner. In addition, since some continuing education credit is likely to be given for a physician's activities as a teacher, the medical student and housestaff training programs in the AHECs offer another vehicle by which practitioners can obtain needed credits for Medical Society membership.

The AHEC Program and the PSRO Program are separate activities. However, to the degree that each PSRO will have a substantial impact on quality of



care, it will need strong ties to the educational process. As the various PSRO units are developed in North Carolina, I expect they can turn to the AHEC network for assistance in developing continuing education programs keyed to patient care topics determined worthy of review by the PSRO.

Many physicians have criticized continuing education programs as being "too academic" and irrelevant to their specific clinical needs. The activities in Shelby and the expected activities of PSRO both relate educational programs to the needs of the practicing physician. There are, however, other mechanisms for assessing the activities of physicians in order to relate continuing education programs to the particular needs of their practice situation. At the moment Judy Kramer, a second year medical student with training in pharmacy, is beginning to work with physicians in one community to help them look at their patterns of drug therapy so they can outline continuing

education programs based on specific practice needs.

If physicians, nurses and other health manpower are ever to deal most efficiently with complicated patient care problems, it will be necessary for them to share activities in continuing education. Several workshops and conferences of an interdisciplinary nature have been developed through the AHEC network, and there is a real opportunity for a dramatic expansion of such activities in the future.

The AHEC network is a logical vehicle for assisting with the implementation of continuing education activities of other programs that have a statewide focus. For example, the Emergency Medical Services Program, the proposed statewide Cancer Control Program, the Rural Health Assistance Program, etc., all have as a part of their goals the delivery of new concepts in patient care to community physicians. Such educational activities could logically reach the practitioners of both the small and large communities of

the state through the AHEC network. Discussions are underway to determine the possibility of implementing such activities.

Throughout this article I have been assuming that continuing education programs ultimately translate into positive benefits for persons seeking medical care in North Carolina. Although there is some evidence to support this, there is also evidence that continuing education does not always change physician performance. One of the central responsibilities of the AHEC Program is to work closely with various practitioners to help them evaluate the impact of continuing education programs on their practice performance. Several beginnings have been made in this area, but there are major opportunities for further developments in the field.

Through the AHEC network, which directly links the University to nine regional centers and in turn links these regional centers to community hospitals and practitioners in surrounding counties, a mechanism is at hand in North Carolina for the coordinated development of high quality, clinically relevant and geographically accessible continuing education activities for physicians and other health manpower. It is now up to the practicing physicians and the medical faculty at both the AHEC's and the medical school to translate this statewide potential into an exciting reality.

Editor's Note: Dr. Mayer is Deputy Director of UNC's AHEC Program.

Who's where

1912:

George E. Bowdoin has retired and moved to Fort Myers Beach, Florida. He and Mrs. Bowdoin are living at 515 South Second Street, zip 33931.

1915:

Samuel Newman, the oldest practicing pediatrician in Danville, Virginia, was given that city's Kiwanis Citizenship Award for 1974. He was honored for his devotion to Danville, for his humanitarianism and for his accomplishments in medicine. The first physician in Virginia to give a blood transfusion to a child, to establish a blood bank and to prepare plasma and parenteral solutions in his office, he accepted the award by saying, "I was surprised that I was singled out for the 1974 Kiwanis Citizenship Award. I have not extended the frontiers of medical science. I merely tried to mediate current medical thought and practice to my patients."

30's

Frederick L. Byerly, '36, is now living near Lexington. His address: Route 4, Box 563, zip code 27292.

Max M. Novich, '39, has been honored by UNC as one of the outstanding athletes in the history of the University's intercollegiate athletics. He reached the quarter-finals in competition for the 1936 U.S. Olympic Boxing Team. A recognized authority on sports medicine, he is currently Clinical Associate Professor of Orthopaedic Surgery at the College of Medicine and Den-

tistry of New Jersey and Chief of Staff of the United Hospitals Orthopaedic Center of Newark.

40's

Fred Cochrane, '40, has moved from Charlotte to Mountain City, Georgia. His post office box is 37, and his zip code is 30562.

William Ross Best, '47, has forsaken North Carolina for Montana. He's now at 2727 Queen Street, Missoula 59801.

John Gambill, '49, gave a speech on "Detoxifying and Managing the Acute Alcoholic" at the opening symposium of North Carolina's Alcoholism Awareness Week. The meeting was held in Raleigh in January. He is Director of Medical Services at The Walter B. Jones Alcoholic Rehabilitation Center in Greenville.

Maxine Dark, '49, is now in Oakland, California. Her address: 4343 Sequoyah Road, zip code 94605.

50's

C. O. Plyler, Jr., '51, of Thomasville has been elected President of the North Carolina Academy of Family Physicians.

Jack Blackley, '51, chaired the opening session of the Alcoholism Awareness Week program in Raleigh in January. He is presently working for the Department of Human Resources as Deputy Director for Alcoholism and Drug Abuse Services of the Division of Mental Health Services.

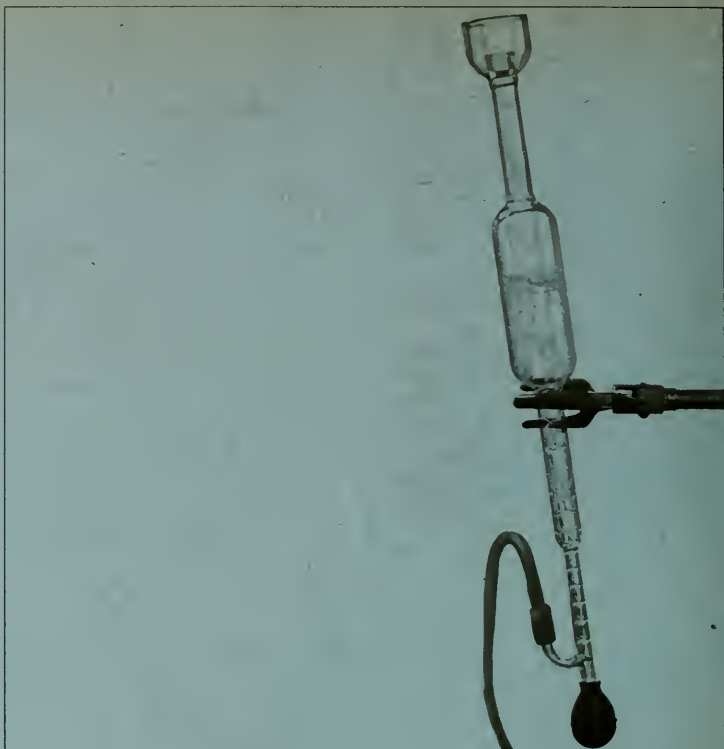
On April 1, **William G. Thurman**, '54, will become Pro-

vost of the University of Oklahoma Health Sciences Center in Norman. He is presently Dean of the Tulane University School of Medicine in New Orleans. Before going to Tulane, he was Professor and Chairman of Pediatrics at the University of Virginia.

Harris Lane Evans, '55, has moved from High Point to 5771 North Wilshire Drive, Tucson, Arizona 85711.

T. Albert Farmer, '57, is now Chancellor of the University of Tennessee Center for the Health Sciences. Until the first of the year, he was Dean of the College of Medicine at Tennessee.

Robert C. Brown, '59, is conducting research into the cause of leukemia. His findings, which he has presented at meetings of the American Association of Cancer Research and the American Society for Experimental Pathology, indicate that x-ray causation of leukemia is not due to the growth of leukemia-related RNA viruses. Instead, cause may lie in the genetic effect of nucleic acids of these viruses that have been incorporated into the cells of the body's organs. The proportion of fatty acids contained in these cells is distinctly different from normal non-cancerous tissue and may thus provide a clue to early cellular changes in the development of leukemia. Dr. Brown is a staff pathologist and Director of the Medical Research Laboratory at the Rutherford Hospital in Rutherfordton.



60's

Kenneth Weaver, '60, has returned to North Carolina from Little Rock, Arkansas. He's practicing in Waynesville, and his address there is 1511 North Main Street. The zip is 28786.

Michael Fennegan, '61, has established a neurosurgical clinic in Harlingen, Texas.

Winslow Brabson, '64, is now living in New Hampshire. He can be reached at 4 Lantern Lane, Exeter 03833.

Donald Whitley, '65, is practicing radiology with Radiology Associates of Richmond, Virginia. He served as a flight surgeon in the Air

Force and practiced general medicine in Salisbury for two years before specializing.

Wayne Mayhue, '65, has moved across the Ohio River from Louisville, Kentucky, to Jeffersonville, Indiana. He's living at 207 Sparks Avenue. The zip is 47130.

Alice and Willis Williams, '65, are living at 12101 Pine Needle Lane, Miami, Florida 33156.

Robert E. Sevier, '66, is practicing internal medicine and endocrinology with **Samuel B. Joyner, '55,** in Greensboro. The Seviars live at 1118 Briarcliff Road.

Jerry Greene, '67, is now

in Winston-Salem. He can be reached at 1303 Winfield Drive, zip 27105.

Larry Mumford, '67, is at 1500 South Main Street in Fort Worth, Texas. Zip code 76104.

Philip Ray Littleton, '67, has moved from Free Union, Virginia, to Burke, Virginia. He receives mail at 6209 Erman Court, zip 22015.

James H. Spruill, '67, is now at 37 Northland in Jackson, Tennessee. The zip code is 38301.

Frank Shavender, '68, has moved from Albany, Georgia, to San Diego, California. His new address is 2683 Caulfield Drive, zip 92154.

Jack Gardner Wall, '68, is practicing in Lenoir. His address there is 817 Chesterfield, SW. The zip is 28645.

Jim Nesbitt, '68, is practicing pediatrics with **Lew Sigmon**, '66, in Jefferson. Their offices are in the Physicians' Office Building of the Ashe County Memorial Hospital.

Bob Shearin, '68, is Director of the Adolescent Medicine Service of the Department of Pediatrics at Georgetown University Hospital.

Clement Lucas, '69, is the new editor of the "Tar Heel Practitioner." Since last July he has practiced family medicine at the Chowan Medical Center in Edenton. He is married to the former Annette Fairless.

Dick Fleming, '69, writes, "We are enjoying a busy but pleasant year in lovely California. Sure beats that Minnesota cold, but we will be re-

turning to Rochester in July of 1975." The Flemings are living at 1427 Brown Drive, Davis, California 95616.

We also hear from Dick that **Bill Wilson**, '69, has been at Letterman Army Hospital since graduation. He completed three years of internal medicine and is now in the rheumatology program there. Bill will be in the Army another two or three years but plans to return to North Carolina to settle down. He and Carol have two children -- Melinda, 4, and Todd, 2.

Dave Sheps, '69, has finished a cardiology fellowship at Yale and is now on the faculty at the West Haven V.A. Hospital. (Again courtesy of Dick Fleming!)

Walter Dickson Moss, '69, has moved from Charleston, South Carolina, to Silver Spring, Maryland. His address: 14139 Castle Boulevard, Apt. 401. Zip 20904.

70's

Larry Boyles, '70, is now a Clinical Instructor in Neurology. He was previously Chief Resident in Neurology at NCMH. He is married to the former Jean Winborne, who is a legal advisor for the Chapel Hill Police Department.

Mark Janis, '70, is in the Department of Medicine at University Hospital in Boston, Massachusetts.

Richard Primm and **Ross Vaughan** are at Vanderbilt University Hospital. Both are members of the class of '70.

Robert B. Jones, '70, is living at 7345 33rd Avenue,

NE, Seattle, Washington 98115.

Charles Malcolm Almond, '70, has moved from Red Springs to Lumberton. He receives mail at 207 West 24th Street. Zip 28358.

Layne Sheffield, '71, is at the PHS Indian Hospital in Shiprock, New Mexico. The zip code there is 87420.

John Reynolds, '71, has moved back to Chapel Hill from De Ridder, Louisiana. He is living at 1912 White Plains Road.

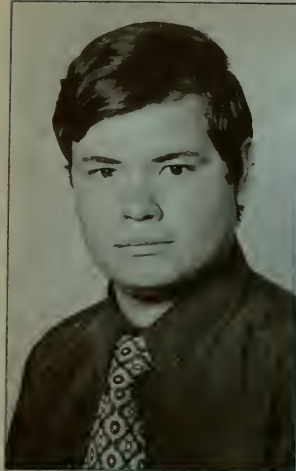
Don Lewis, '71, is Chief Medical Resident at the M.I. Bassett Hospital in Coopers-town, New York. He writes, "I've been invited to remain on the staff and have happily accepted. My wife Dutchy and I are the new proud parents of twin boys, Alan and Phillip; born June 28, 1974. Along with our eldest, Geoffrey (aged 3), we have a busy family and think we have found the ideal spot for them to grow and mature."

Steve Dewees, '71, has gotten out of the Air Force and is living at Eastgate in Sylva. The zip code is 28779.

Dan Summerlin, '73, is now living outside of South Royalton, Vermont. The address is RFD 2, zip 05068.

Karl Wagner, '74, has entered the residency program in psychiatry at the John Umstead Hospital. He will do in-patient work with admissions from Orange, Chatham and Alamance Counties.

William E. Bowman's new address is 813-A Fort Barry, Sausalito, California 94965. He's in the class of '74.



Frank Lee Dameron

, a member of the class of 1975, was killed in a private plane crash on December 23, 1974. The son of Mr. and Mrs. Hubert G. Dameron of Tabor City, he first came to the University as an undergraduate in 1967. Although he spent the next seven and a half years in Chapel Hill, his goal was to return to his hometown to help meet that community's pressing medical needs.

Frank's untimely death is tragic for his family, for the residents of Tabor City and for this medical school, which will award his degree posthumously. In recognition of his dedication to medicine and his excellent academic and clinical record, he has also been elected posthumously to Alpha Omega Alpha.

There is a crying need in our country for more well trained, dedicated physicians who, like Frank, are anxious to practice in medically deprived areas. In recognition of this, the senior class would like to establish a scholarship fund in memory of our former classmate. The scholarship will benefit medical students who have made a definite commitment to practice in an area of the state or country with a demonstrated need for doctors.

Five UNC alumni are now at Madigan Army Medical Center in Tacoma, Washington. Captain John Colpitts, '74, is in the family practice residency program; Captain John Thornton, also in the class of '74, is a medical intern; Captain George Underwood, '73, is a resident in internal medicine; Brigadier General William H. Meroney, who received his bachelor's degree from UNC-CH and received the University's Distinguished Service Award in 1969, is Center Commander; and Major Robert Carithers, a staff physician, did his undergraduate work at UNC-CH and was Chief Resident in medicine at NCMH.



We would sincerely appreciate any contributions that alumni or friends of the medical school could make to this fund. Cash or checks (made payable to the Medical Foundation of North Carolina, Inc. and earmarked for the Frank Lee Dameron Memorial Fund) may be sent directly to the Medical Foundation of North Carolina, Inc., 302 South Building, Chapel Hill, North Carolina 27514.

Remember

March 27 - Medical Alumni Day
March 28 - Malignant Disease Symposium. This year's topic is childhood malignancy.

by Christopher C. Fordham III, M. D.

126 MacNider

In April 1974, the University of North Carolina School of Medicine, together with the Royal Society of Medicine of London and the Royal Society of Medicine Foundation of New York, co-hosted a three-day conference on the Continuing Education of the Physician. The proceedings of this conference have now been published by the Royal Society of Medicine. This was, in fact, the first Anglo-American conference sponsored by these two organizations to be conducted on our side of the Atlantic. The program proved to be enlightening, informative and in some ways fascinating; the tandem description of how each country approaches certain aspects of its continuing education challenges held the attention of the audience.

As indicated in these sessions, there are a number of compelling problems related to the continuing education of the physician. First and foremost, how can the physician keep up in today's world and continue to devote the required time to the care of his patients? How can the medical schools and professional societies assist him or her most effectively in this vital task? What are the implications of peer review and the issues of relicensure and recertification with respect to continuing education? How can continuing education embrace an appropriate spectrum of advances in fundamental biologic science, clinical investigation, and applied methodology?

Clearly, one of the more exciting developments in the field of continuing education



for the physician is that of an increased opportunity to participate in educational programs as a teacher. To teach is to learn, and to have meaningful contact with bright students and house-staff can surely be an important impetus. The creation of an educational environment for the training of new health manpower, as well as for sustaining those already practicing their profession, is one important thrust of the Area Health Education Center program in North Carolina. The creation of that educational environment at regional centers throughout the state, in association with the University and sister institutions, represents a major educational development, an important by-product of which can be an enhanced opportunity, both in terms of quality and availability, for continuing education of the physician and other health professionals. It is reasonable to believe that a logical consequence of this activity would be improved patient care. And, in the penultimate analysis, that is what it's all about.

Dr. Kelly West has humorously demolished the value of existing medical knowledge with this bit of specious reasoning:

- "(1) Only a small portion of the current body of medical knowledge can be taught in four years.
 (2) Much of the knowledge which will be employed in the student's future career is not known today and, therefore, cannot be taught.
 (3) Not all that is taught is learned.
 (4) A portion of what is learned will soon be obsolete.
 (5) A small part of what is taught is erroneous.
 (6) The physician of the future (including family physicians) will be specialists -- thus, some of what they learn will have limited relevance to their future careers.
 (7) Of that which is taught and learned, and relevant, much is quickly forgotten."

According to Dr. West, the medical student is taught a usable process. Many of our techniques have been around for 2,000 years, yet the content becomes outdated almost as soon as it is taught. Without constant education a physician today is practicing historical medicine, not contemporary medicine. The consequences could be devastating to his or her patients.

Thus far, I have painted a dramatic picture for you: continuing medical educators moping around making Hamlet hand-wringing statements and novice physicians suddenly discovering that the long years they've spent in education are but a limp nullity. Is that an exaggeration?

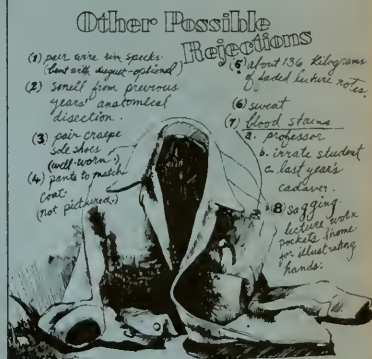
Turn to the practicing physician, the man or woman who must function under our present system, to see how he or she fares.

Because we as physicians must share, if nothing else, a common curiosity about the mechanics of man, how he functions, why he becomes diseased and what we can do to improve his lot, continuing education in the first instance is the responsibility of the individual physician. Theoretically, our self-conceived triumvirate -- researcher, practitioner and educator -- should provide our salvation. Yet the researcher becomes obsessed with the strange things he's doing to small animals; the practitioner simply needs to know what is applicable at the bedside; and the educator, supposedly the catalyst between the two, fumbles around knowing that he is the medium but confused or unaware of the message. Marshall McLuhan may have put it better in verse:

In modern thought (if not in fact),
 Nothing is that doesn't act,
 So that is reckoned wisdom, which
 Describes the scratch but not the itch.

As educators, we have depended solely upon altruistically motivated students, taught them what we or they thought they might need but have never been able to determine if our teaching has made a difference in their practice. Why doesn't the educator just toss in his white coat, admit defeat and hope the interests of research and practice will somehow crystallize into a workable system of quality

health care? An increasingly sophisticated public won't let us.



Since advances in medicine have been widely and expertly advertised, the public naturally demands that we deliver. Their influence has instigated some radical reforms in the practice of medicine:

- (1) The United States Congress recently passed legislation . . . for Professional Standards Review Organizations, an amendment to the Social Security Bill that requires documentation of quality medical care for all Medicaid and Medicare patients.
 (2) The Association of American Medical Colleges strongly recommends that medical schools and teaching hospitals become closely involved with Professional Standards Review Organizations and the setting up of standards.
 (3) Many medical specialty boards now base recertification on some form of continuing education.
 (4) Although only one state now requires some form of medical audit or a certain number of hours accumulated in continuing



completely harmless but don't hurt anyone.

medical education for re-licensure, other states are planning such action. Eighteen states now require some type of continuing medical education for continued membership in the state medical associations.

(5) The Joint Commission on Accreditation of Hospitals requires that medical audits be documented and that this ongoing evaluation serve as a basis for continuing education programs.

A strong argument can be developed against enforced regulations of an individual's professional performance, but consider another very decisive element in this action. For the first time physicians will discover exactly what they lack in their abilities to perform, and educators will know precisely where to channel their energies to correct deficiencies. Potentially, we have a solution for two of the most difficult problems yet identified in continuing medical education: how to stimulate a continuing medical education program and how to distinguish between perceived and real educational needs.

In sorting through the many educational approaches open to us, our responsibility as educators is to provide an organized, readily accessible system tailored to the physician-students.

Gutenberg unearthed one system of communication that puts Pandora's box to shame. Traditionally, a physician's continuing education has been through literature, which in many respects a fairly advantageous method. The printed word

can be read at leisure, kept for further reference and digestion and is accessible to read in almost any place. However, the proliferation of journals bombarding the physician today is reminiscent of a rabbit habit.

In 1972, the National Library of Medicine Medlars Management Section indexed 231,610 medical articles -- and that covered only about half of the medical journals published. According to Dr. Martin Cummings, "A person reading 200-300 words a minute would take 50 years to read a single year's scientific publications even if he read 24 hours a day, seven days a week." Thus, if a physician plans to live a hundred years, he will only wade through two years of the journals.

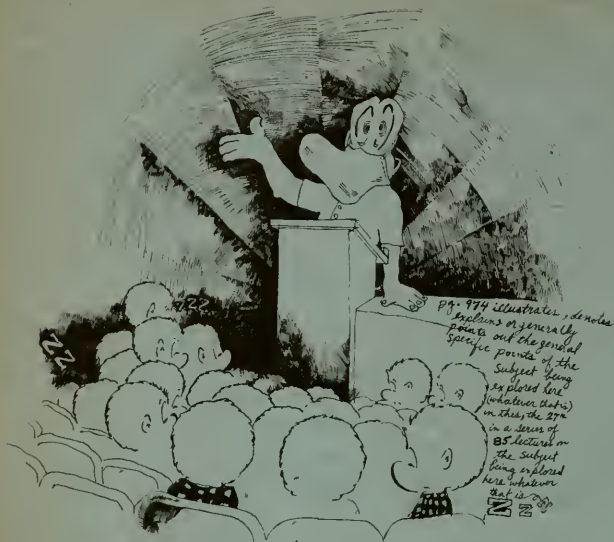
In discussing this imponderable mire of messages, messes and minutiae (personal correspondence), Dr. William O. Robertson, Professor of Pediatrics at the University of Washington, proposed a partial solution that would require each journal and each author to specify its objective in seeking publication and then publish under a mandatory, appropriate title. One could conjure up such titles as the **American Journal of Drug Promotion** (whose objective would simply be to promote drug sales) or the **American Journal of Personal Promotion** (particularly popular if it and the preceding were provided gratis to all foundations in the National Institutes of Health). There is actually published now a **Journal of Irreproducible Results** (which is de-

lightful but has not as yet captured its justifiable share of articles). Others have proposed a **Journal of Negative Results** to which I would add a **Journal of Indeterminable Results** and a **Journal of Premature Results**, each of which would relieve the existing literature of many, many articles. The **Journal of Quiet Retractions** would be a worthy companion to the **Journal of Completely Biased but Unsupported Opinion**. I would name a foreign edition of the **Journal of Quiet Retractions** the **Acta Retracta**.

Universities with their "publish-or-perish" philosophy have been guilty of compounding the problem of quantity versus quality in the journals. A solution to pare down the 2,000,000 articles appearing in 50,000 scientific journals annually has been proposed by Dr. George Miller: "The problem will never be solved by speed-reading courses. What we really need are courses that teach people to write things that are worth reading slowly."

In view of the paper shortage, if we would paint a nativity scene over our priceless pieces of prose and send them out as Christmas cards, we might be doing ourselves and our fellow physicians a more worthwhile service than prodding the publishers for our own personal promotion.

The physician is just slightly less confused if he turns to formal programs for his continuing education. The 19 November 1973 issue of JAMA offers a gourmet selection of continuing



medical education experiences. Two thousand four hundred forty-one continuing education courses were accredited by the American Medical Association for 1973-74, a 17% increase over 1972. Eighty-five medical schools were involved in 43% of these courses. In addition to the accredited courses, proprietary continuing education -- for profit rather than educational intent -- is springing up from private clinics, hospitals and organizations.

We must be careful in this flood of knowledge and communication to remember and to fulfill our ultimate aim: health care of the highest quality. We will not attain our goal by massing bodies to somnolent lectures, demanding that doctors pass memory tests or obviously concentrating on inane informa-

tion that may have a general relevance to medicine but no clear applicability to specific problems of practice. As Dr. Donald Williams so aptly put it (since most doctors attend only one or two meetings per year on the average): "It is doubtful if salvation is attained by attending church for one hour at Christmas and Easter."

Our task is further complicated because we are in the midst of a communications revolution introduced by the electronics media. Traditional methods of education are just not applicable to the visually-oriented younger generation. Thus, we are all grasping at straws of new techniques of learning: 8-millimeter, single-concept films; one- and two-way live and tape television; cassettes; programmed learning; Telstar,

etc., etc. Although new and flexible modes of communication are commendable in trying to reach the physician, we must ask if they are relevant.

The word came down from the dean
That with the aid of the teaching machine
King Oedipus Rex
Could have learned about sex
Without ever touching the queen. (Anon.)

Having established a need for continuing medical education and recognizing that there is a wide choice of methods to relay pertinent information, we must question if the university can augment a workable system of continuing education to reach our goal: better health care.

The radiating point which can bring some semblance of order to the anarchistic chaos that reigns in continuing medical education today is the university. Universities need not ask for dictatorial power over continuing education, but they are in a unique position to collaborate and cooperate with private physicians, hospital staffs, medical and professional societies, health professionals, public agencies, communications and educational experts, and ultimately the public itself. The individual physician should find a unified, organized system of continuing medical education in the university. Could undergraduate or graduate education flourish if curricula were planned haphazardly at any instructor's whim, completely bypassing the administration of the medical school? If we believe this, there would be no need for a medical school or a medical administration. Why, then, should our

basic policies be limited to undergraduate and graduate training?

The Vollan, Dryer and Millis reports all emphasized that although medical schools have shouldered some responsibility for continuing education in the past, they must assume a much larger role in the future. First, we must recognize and transcend some basic flaws in the mission of our universities.

Sacrosanctity is dead: In this decade of continuing education -- and it is surfacing as such partly by individual desire, partly by force -- the university can no longer confine education just to students on campus. We have been cloistered behind ivy-covered walls, yet we are not a sacrosanct little family. Universities must reach out and spread the base of their community involvement. Community involvement does not demean research or undergraduate and graduate teaching. Each has a place in a university. Paradoxically, however, we have just begun to recognize that we have a much larger student body with educational needs outside the university proper than we have on campus.

The resurrection of the faculty: The crux of successful teaching depends upon careful selection of faculty. I emphasize carefully selected faculty because there are people who do make a major contribution to a university but who are not very good teachers. In addition to having a thorough knowledge of his subject, each continuing medical education faculty member

must relate to practitioners, create a flexible, non-threatening learning experience to meet the changing needs of practitioners and understand a variety of teaching methods and media.

To accommodate both the practicing physician and the community, continuing education should have the following commitment from a university. These recommendations are taken in part from the recommendations of the Council on Medical Education of the American Medical Association and the Report of the Ad Hoc Committee for Continuing Education of the Association of American Medical Colleges.

Curriculum: A curriculum content which is developed to meet the needs of the learner rather than the interests of the teacher. By the use of a medical care audit system, a medical staff through its audit committee selects a disease, develops criteria for treatment, audits records to compare criteria with care provided, plans needed educational or other corrective action and reaudits later to determine whether change has occurred. Evaluations should always be directed toward specific intended improvement in the day-to-day practice of medicine.

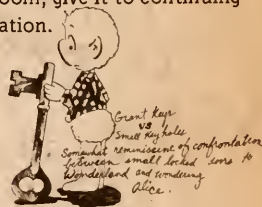
Funding: Support for a budget adequate to the educational program undertaken and which will insure continued improvement of the program. The economic philosophy of supporting continuing education by tuition or federal grants alone is a lofty ideal, but it will no

longer suffice under present financial constraints.

Administration: Administration of the continuing medical education program by a responsible person having the respect and support of the administration and the faculty of the school as well as the practitioner he serves.

Faculty: A teaching staff of physicians and their associates of proven ability, training and experience who have a responsibility to impress upon students that education is continuous throughout their professional lives. Faculty and department commitments and efforts in continuing education should be rewarded and weighted equally with teaching and research activities during the annual consideration of salary and promotion.

Facilities: Adequate facilities assigned on a regular basis to encourage participation and new methods of education. The current philosophy in most universities is if no one else wants the room, give it to continuing education.



England's commitment to continuing medical education, as reported by Dr. Paul Beeson to the Association of American Medical Colleges, states that in England "Postgraduate teaching centers, now over 200 in number, have been located all over the country. These are equipped with lounges, seminar rooms and

libraries, and GPs receive payment for attendance at post-graduate instruction." "We must hurry and catch up with the troops, for we are their leader." (Pogo)

The university should be involved in an ongoing instructional process. Education should be a part of all life, not just an isolated part of life. When the results of education are implanted only in the minds of the young, there is a time lag of years before the knowledge is injected into the continuing daily stream of professional and occupational pursuits. Institutions of higher learning should strive to reduce the time lag between the discovery and application of knowledge by making the results of research immediately available to health professionals who are dependent upon new knowledge and information to serve the community at the highest levels of effectiveness. To quote Sir William Osler's metaphor:

"How common the experience to enter a cold cheerless room in which the fire in the grate has died down, not from lack of coal, not because the coal was not alight, but the bits, large and small, falling away from each other have gradually become dark and cold. Break them with a poker, get them together, and what a change in a few minutes."

The role of the university is to reflect and anticipate changing social needs and objectives. Our aim is to make life a little better for all. Isn't that what education is all about?

Of chalk, classrooms, and clinics

The National Institute of Arthritis, Metabolism and Digestive Diseases has awarded a two-year, \$257,162 contract for the evaluation of areas in the fields of nephrology and urology which require immediate and long-range research support.

Carl W. Gottschalk, Kenan Professor of Medicine and president-elect of the American Society of Nephrology, and **William E. Lassiter**, Professor of Medicine, will head a 10-member coordinating committee from across the country. Coordinating committee members are Drs. Thomas E. Andreoli, Chester M. Edelmann, Jr., Robert H. Heptinstall, Bernard Lytton, Brian MacMahon, John F. Maher, John S. Najarian, Jay P. Sanford, Thomas A. Stamey and Curtis B. Wilson, Jr. This

committee will oversee the efforts of eleven specialty committees, which are chaired by Drs. John P. Merrill, Laurence Earley, Louis Tobian, David P. Earle, Robert L. Vernier, Erich Windhager, Jay Y. Gillenwater, Henry L. Barnett, Kenneth D. Gardner, Jr., Abraham I. Braude and Lynwood H. Smith.

Merrel D. Flair, Director of Medical Studies, has been named chairman-elect of the Association of American Medical Colleges' Group on Medical Education.

Dean Christopher C. Fordham III, was a featured speaker at the third annual meeting of the Organization of Student Representatives, which was held in conjunction with the AAMC Annual Meeting in Chicago last November. Dean Fordham also

participated in a panel discussion on specialty distribution during a joint meeting of the Council of Deans, the Council of Academic Societies and the Council of Teaching Hospitals.

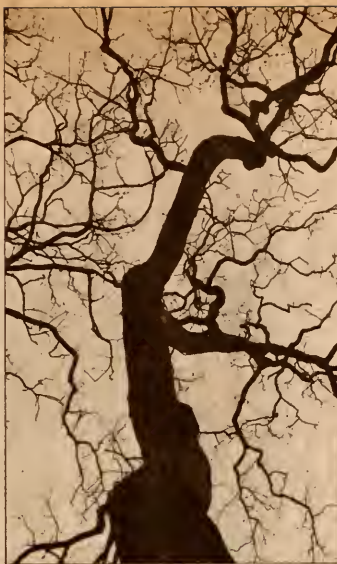
Kenneth Sugioka, Chairman of the Department of Anesthesiology, has been named president-elect of the Society of Academic Anesthesia Chairmen. The organization meets annually to establish guidelines for departmental activities in terms of teaching, research, patient care and the role of anesthesiology in an academic setting.

Archie T. Johnson, Jr. is chairman of the 10-member Perinatal Health Program Advisory Council for the State of North Carolina. The Council is concerned with improving health care for infants through the first 28 days of life. Dr. Johnson is an Assistant Professor of Pediatrics.

Harrie R. Chamberlin, Professor of Pediatrics, has been appointed to a four-year term on the Governor's Council on Developmental Disabilities.

Kenneth M. Brinkhous and his associates have developed a new, simple test for Von Willebrand's Disease, a rare bleeding disorder that was previously hard to diagnose. The Alumni Distinguished Professor of Pathology described the new test during the first annual Harry P. Smith Memorial Lecture, delivered before the American Society of Clinical Pathologists.

Faculty members presented two papers at the December meeting of the Southern Surgical



Association in Boca Raton, Florida. The first, "Radionuclide Imaging in the Early Diagnosis of Renal Allograft Rejection," was written by **George Johnson, Jr.**, Professor of Surgery; **Stanley R. Mandel**, Associate Professor of Surgery; **William D. Mattern**, Assistant Professor of Medicine; and **Edward V. Staab**, Professor of Radiology. **Joseph A. Buckwalter**, Professor of Surgery, and **Colin G. Thomas, Jr.**, Chairman of the Department of Surgery, collaborated with Joel B. Freeman of the University of Iowa on "Is Childhood Thyroid Cancer a Lethal Disease?"

Two professors have received awards from the Research and Evaluation Department of the National Council on Alco-

holism. **Fred W. Ellis**, Professor of Pharmacology, and **Harold J. Fallon**, Professor of Medicine and Pharmacology, were presented the Volunteer Service Award for the work on the Peer Review Board.

Glenn Pickard, Associate Professor of Medicine, was featured on a CBS series of short programs entitled "The Progress of American Medicine," which was aired in October. Dr. Pickard discussed rural medical care.

One of the sponsors of North Carolina's Alcoholism Awareness Week, January 19-25, was the Center for Alcohol Studies. **John A. Ewing**, Director of the Center, coordinated the Raleigh symposia and presented papers entitled "Tips on Identifying the Early Alcoholic" and "Medications for the Chronic Alcoholic." **Fred W. Ellis**, Professor of Pharmacology, and **Morris W. Lipton**, Sarah Graham Kenan Professor of Psychiatry, chaired sessions of the program.

Peter V. Scott is a newly appointed Associate Professor in the Department of Anesthesiology. He spent last year as a consultant anesthetist to the University Hospital of Wales, Cardiff, Wales. Dr. Scott received his medical training at the University College Hospital Medical School of the University of London.

Kenneth Dee Carey has been appointed an Assistant Professor of Pathology. He will also serve as a veterinary pathologist for the Division of Laboratory Animal Medicine. He holds the

B.S. and D.V.M. degrees from the University of Illinois and is completing work on the Ph.D. degree at the University of Missouri, where he has been a research associate in veterinary pathology since 1970.

Emily S. Barrow, Associate Professor of Pathology, will take a year's leave beginning April 1, to pursue a research study program on the development of antibodies to Factor VIII in hemophiliacs at the French Red Cross Center for Hemophilic Children in Yvelines, France.

Lewis C. Becker, Assistant Professor of Medicine, has resigned to accept a position at the Johns Hopkins School of Medicine.

Peter W. Munt, Assistant Professor of Medicine, is now at Queen's University in Kingston, Ontario.

A Greensboro native, **George T. Wolff**, has been appointed Assistant Professor in the Department of Family Medicine. He will direct the Family Practice Residency Training Program at the UNC/Cone Hospital teaching program. Dr. Wolff is a graduate of UNC-CH and Jefferson Medical College.

Stanford A. Roman and **Robert J. Sullivan, Jr.**, both Assistant Professors in the Department of Medicine, have resigned. Dr. Roman is at Boston City Hospital, and Dr. Sullivan is at Duke.

More than 200 guests from all over the U.S. gathered in January to honor **Nathan A. Womack**, Chairman Emeritus of the Department of Surgery, at the third annual Womack

Eight scientists from the People's Republic of China spent four days in North Carolina at the end of October. While in the state, they looked at neuropharmacology and cancer chemotherapy programs at UNC, Duke, the National Institute of Environmental Health Sciences and Burroughs Wellcome. Pai-chan Peng, Professor of Pharmacology, and Paul L. Munson, Sarah Graham Kenan Professor and Chairman of Pharmacology, coordinated the group's visit to UNC. Dr. Peng also served as their interpreter. The scientists traveled under the auspices of the Committee on Scholarly Communication with the People's Republic of China.



Surgical Society Meeting. Dr. Womack served as the Department's first chairman from 1951 to 1967. The featured guest speaker was Dr. Verne Chaney, who succeeded the late Thomas A. Dooley in his medical work in Laos. Dr. Chaney was a house officer here and is a member of the society. The Womack Society's members are former and current surgery residents and members of the Department's faculty. Joining their number this year was **W. Reece Berryhill**, Dean Emeritus. Despite his lack of surgical training, Dr. Berryhill was given an honorary membership in the society named for his long-time colleague and friend.

Hermann N. Burian

Hermann N. Burian, 68, died on November 25 in Milan, Italy, while lecturing there. He was a Professor of Ophthalmology.

* An internationally recognized authority on disorders of ocular muscles, particularly crossed eyes and binocular vision, Dr. Burian joined the faculty of the School of Medicine in 1970 after nearly two decades at the University of Iowa. He was the author of several books and more than 150 papers on ophthalmology. He also served on the boards of six specialty journals.

Among his recent national honors were the Proctor Medal from the Association for Re-

search in Ophthalmology, as well as the Hektoen Gold Medal and Certificates of Merit from the American Medical Association.

He is survived by his wife and two sons. Memorials are being received by the Department of Ophthalmology for the National Society for the Prevention of Blindness.

Barry named General Director

Dennis R. Barry has been named general director of The North Carolina Memorial Hospital. He succeeds John M. Danielson, who resigned last October to accept a position with the Capitol Area Health Consortium in Hartford, Connecticut.

Barry, 35, has been administrative director of the hospital and assistant professor of hospital administration at the University of North Carolina School of Medicine since 1972. He came to Chapel Hill from Phoenix, Arizona where he was vice president for planning and development of the Samaritan Health Service.

He spent six years at the Evanston Hospital in Evanston, Illinois. Acting first as administrative resident, he was subsequently appointed assistant administrator and later director for patient care administration. Following a four-month visiting fellowship at the Leeds Regional Hospital Board in Harrogate, England, he returned to Evanston as director of planning and de-

velopment. Two years later he was named acting vice president for administrative services.

As registered pharmacist, Barry was graduated from the University of Illinois. He worked as a pharmacist for two years before entering the University of Chicago Graduate School of Business, where he received the M.B.A. degree.

He is a member of the American Hospital Association, the American College of Hospital Administrators and the North Carolina Hospital Association. He is also a member of the advisory board of the Cooperative Information Center for Hospital Management Studies at the University of Michigan and is hospital administration preceptor for the Washington University and Duke University programs in hospital administration.

He is married to the former Veryl Johnson of Chicago. They have three sons - - Todd, 11, Craig, 9, and Brian, 4.

What's going on here?

From the potpourri of continuing education, we'd like to outline a few of the programs sponsored by the School of Medicine.

IF YOU CAN'T GET AWAY . . .

If you can't come to Chapel Hill, why not let Chapel Hill come to you? The Office of Continuing Education can help your group, hospital or community organize a program that is convenient for you.

Your first step is to determine your needs. Dr. Oscar L. Sapp III, Associate Dean for Continuing Education and Alumni Affairs, can help you do this. Once you've defined a problem, he will contact the faculty here at the School of Medicine, and they will devise a course or series of courses that answer your questions. Then the faculty will visit your community on the dates that suit you.

IF YOU CAN COME TO CHAPEL HILL . . .

Rounds, conferences, and seminars are held every day at the hospital, and they are all open to anyone who would like to attend. Some of these activities are listed below. If you'd like more information or a more complete list, contact either the Office of Continuing Education or the sponsoring department. If you don't see anything that appeals to you on this schedule, contact Dr. Sapp. He'll try to arrange something to fit your needs.

			Mon.	Tues.	Wed.	Thur.	Fri.	Sat.
March 28	Malignant Disease Symposium--Childhood Malignancy, Berryhill Hall, Chapel Hill	Anesthesia Complications Conference Anesthesia Conference Cardiac Catherization Conference Cardiology Rounds		2:45 4:00	2:45	3:00		
April 13-14	First Annual Colloquium on Practical Rheumatology, Carolina Inn, Chapel Hill	Chest Medicine Conference Chest Medicine & Surgery Conference Child Psychiatry Diagnostic Conference Child Psychiatry Screening Team	2:30 4:00 8:30		8:30	8:30		
April 16-18	Raney Visiting Professorship, Robert B. Salter, M.D., University of Toronto, Berryhill Hall, Chapel Hill	Child Psychiatry Treatment Conf. Cleft Palate Conference Clinical Pathology Seminar Combined Radiation Therapy Gyn-Oncology Conference Complicated Obstetrics Conference	8:30	10:00 12:00 4:00			8:30 8:00	
May 12-13	Family Planning Seminar, Carolina Inn, Chapel Hill	Dermatology Clinical Conference Dermatology Clinical Slide Conference Dermatology Therapy Conference			11:00 & 12:00 10:00			
May 15-16	Third Annual Conference on Heavy Metals in the Environment, Berryhill Hall, Chapel Hill	Duke-UNC Radiology Conference Family Medicine Noon Conference Family Practice Conference Family Therapy Treatment & Conf. Gyn Endocrine Conference	8:15 12:00		7:30 p. m. (alternates bi-weekly with Duke) 12:00 1:00		9:00 1:00	
May 23	Perinatology Post graduate Course, Berryhill Hall, Chapel Hill	Hand Seminar Hand Surgery Clinic Medicine-Pediatrics Genetic Conf. Medicine-Pediatrics Renal Conf. Morbidity & Mortality Conference Medicine - Surgery Gastroenterology Conference Nephrology Conference Nuclear Medicine Conference Ob-Gyn Seminar Orthopaedics Presentation Conf.				4:00	4:00	
May 26-30	Endoscopy Workshop Berryhill Hall, Chapel Hill			2:00	2:00 4:00			
June 3-5	Cardiac Rehabilitation Conference, Carrington Hall, Chapel Hill							10:00
August 4-8	Topics in Internal Medicine --Third Annual Beach Workshop, Myrtle Beach Hilton, Myrtle Beach, S.C.	Pediatric X-ray Conference Pediatrics-Medicine Infectious Disease Conference Plastic Surgery Seminar Pre-Operative Conference Psychiatric Diagnostic Conference Psychiatric Family Diagnostic Conf. Selected Topics Seminar Tuberculosis Conference Tumor Clinic	12:30 12:30	23:30 12:30	4:00 4:00 2:30 2:00 1:30	12:30 12:30 & 11:00	12:30 12:30	12:30 12:30
		Patient Review Conference Pediatric-Neurology Conference Pediatric Surgical Conference Pediatric X-ray Conference Pediatrics-Medicine Infectious Disease Conference				3:30		
					1:30 (third Monday combined with Duke at 4:00)			
					8:00			
			1:30	1:30	1:30	1:30		
			1:30	2:00	2:00	10:30		
				9:00				
								8:00
							11:00	
			9:00	10:00	9:00 & 10:00	10:00	9:00 & 1:30	
		UNC-Duke Pediatric Chest Conf.				11:00		

See You at Pinehurst

UNC Medical Alumni Social Hour

Friday, May 2

6:00-7:00 P.M.

at the Holly Inn Ballroom

UNC Medical Alumni Bulletin
226 MacNider
Chapel Hill, N.C. 27514

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Bulletin: Vol. 21 Spring Issue 1975



With this issue, we try something new. Some clinical and practical tips that (we hope) will be useful in your practice.

Dr. Norton Hadler, a member of our Division of Rheumatology and Clinical Immunology, has written an article on the management of clinical arthritis. Hint: he likes aspirin. Your comments, criticisms, etc. are welcome.

Getting tired of long office hours? Then read Dr. Jack Lynch's article describing his office schedule. He and three partners keep their office from 8:00 in the morning until 8:00 at night yet still have plenty of time off. Unbelievable? They don't think so.

Dr. Lynch, a member of the class of '42, has also agreed to be our "Consultant in High Point" for the Bulletin. We have another new member of the Editorial Board, Ray Mitchell. Ray, a second year student, will keep us (and you) in tune with the student body.

Alumni Day was a truly fine occasion this year. About 100 people came for the banquet and DSA presentations. Then there were the reunions — the Carolina Inn will never be the same! Until next year.



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Bulletin: Vol. 21 Spring Issue 1975

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The Bulletin, of which this publication is Volume 21, No. 2, is published quarterly by the UNC Medical Alumni Association, Chapel Hill, N.C., 27514. Postage is paid by the non-profit association through U.S. Postal Permit No. 24.

The atmosphere surrounding the medical management of rheumatoid arthritis was summarized in an interchange that occurred twenty years ago between two giants of twentieth century American medicine. After a national meeting, Fuller Albright, the endocrinologist, remarked to Walter Bauer, the pioneer rheumatologist, that soon he would know all there was to know about rheumatoid arthritis except what causes it and how to cure it.

This condemnation has lingered to provide a challenge to the investigator - - but to the clinician it can be counter-productive. Rheumatoid arthritis is a common affliction with considerable morbidity. Yet we know that the majority of patients with rheumatic complaints do not seek medical advice. Could it be that the medical community is not only non-aggressive in seeking out such patients but is less than receptive to their collective suffering? I believe medicine has available to it today an armamentarium capable of significantly modulating the pattern and impact of this disease.

In discussing management, a scientific definition of rheumatoid arthritis will not suffice. The social ramifications of an affliction whose hallmarks include malaise, morning stiffness, intense articular

pain and deformity, and a variety of extra-articular manifestations are enormous. Certainly the primary physician should assume a pivotal role in helping his patient restructure his life consonant with the patient's functional capacity. It is possible to modulate the impact of this disease with clinical maneuvers, but is it possible to modulate the course of the disease?

To answer this question, one needs some grasp of the natural history. The classic studies attempting to define the prognosis from the time of onset in patients managed conservatively are now almost 30 years old and are still relevant. These studies show most of the patients did not deteriorate over five years of conservative management.

There are several lessons to be gleaned from this research. From the time of presentation the future need not be that bleak if the patient is afforded conservative therapy alone. The pattern of remissions and relapses as well as severity is extraordinarily variable and not predictable. This creates a considerable dilemma when trying to formulate a program of pharmacologic intervention - - one that is rapidly compounded when we come to examine the available drugs. The mainstay and essence of inter-

vention is to minimize the psychosocial impact, attempt to alleviate pain and to preserve function: that is what is meant by conservative management. The management of rheumatoid arthritis beyond that is not mandated by the diagnosis itself but by the course of the individual patient!

What are the elements of a program of "conservative management"? There are a number of maneuvers that clinical experience and some corroborative data support as effective intervention with minimal side-effects. These include rest, exercise, and agents with analgesic and anti-inflammatory effects.

The rest-exercise paradox has caused confusion for years and has led to a rather empirical approach. The patient with rheumatoid arthritis suffers pain on use of an inflamed joint as well as a number of systemic manifestations, including malaise. Periods of rest during the course of daily activities are palliative. The use of simple splinting devices such as resting wrist and knee splints at night and "cock-up" wrist splints during activity can spare the patient a considerable degree of discomfort. On the other hand, we know that muscle atrophy about inflamed joints occurs early in rheumatoid arthritis and that these para-

Rx for Arthritis

by Nordin M. Hadler, M.D.

Dr. Hadler, an Assistant Professor of Medicine and Bacteriology, presented this paper at this year's meeting of the North Carolina Medical Society in Pinehurst. He teaches a course in immunology to first year students and has conducted numerous post-graduate workshops on arthritis.



articular structures are integral to the biochemical integrity of the joints with which they are associated. Preservation of muscle function should spare the inflamed joint additional trauma. This is particularly true for weight-bearing joints. Simple programs of exercises - particularly non-weight bearing exercises - should be introduced into the therapeutic milieu. Patient and family education, rest, maintenance of muscle bulk and tone, palliative splinting and psychosocial support all comprise the foundation of management for all patients with rheumatoid arthritis and cannot be overemphasized. These interventions are worthy of considerable in-depth discussion, but now I wish to focus on several drugs that are currently in use.

The cornerstone of conservative therapy is to attempt to pharmacologically ameliorate pain, if not inflammation. Since life expectancy is little altered by this chronic disease, considerable thought must be given to choosing agents assured to have considerably less serious "side effects" than the potential ravages of the disease. Thus narcotics, to use an extreme example, have obviously no role in chronic management. However, this red flag should be raised when considering all agents where clinical experience is limited compared to the individual patient's life expectancy. Often the issue is not clear-cut, so it is worth our while to consider several categories of new and old drugs.

We have a single agent that has withstood the test of time in spite of precious little scientific

documentation - aspirin. The bark of the willow tree has held a place in the theory and practice of physic since antiquity - useful for agues, fevers, etc. Synthetic aspirin, acetylsalicylic acid, was introduced in 1899 and rapidly found its way into the life-style of the civilized world. Some 30 tons are consumed in the United States daily! Taken sporadically and in low doses, it is certainly antipyretic and analgesic. Astute clinicians have known for almost a century that taken in high doses only, aspirin can produce an anti-inflammatory effect in rheumatoid arthritis. There are no long-term controlled trials, nor does any study examine the rate of progression of erosions during aspirin therapy. Nonetheless the clinical utility of high-dose aspirin therapy has been established. In many patients this intervention results in dramatic relief from pain and stiffness, permitting considerable functional improvement.

Several aspects of the pharmacology of aspirin are worthy of attention. If the urine is alkaline, renal clearance is markedly enhanced. Thus the use of absorbable antacids is counterproductive to attaining the sustained high serum salicylate level prerequisite to the anti-inflammatory effect.

The half-life of salicylate in the blood is quite variable between individuals, ranging between 3 and 8.5 hours. Thus statements that one needs 5 grams per day divided in four hourly doses are approximations. It is necessary to gradually increase the dose and decrease the interval of adminis-

tration until one sees either an effect or toxicity, manifest by either tinnitus or decreased auditory activity. Because of the variability in half-life, there is little to be gained to justify the increased expense of timed-release preparations of aspirin.

Another interesting and relevant aspect of aspirin pharmacology is that the half-life increases as the serum level increases. Thus it may take a very small increment in dose to see an effect in a patient who is taking many grams daily without relief. Likewise a decrement, such as one pill, can often abrogate tinnitus.

For the past several decades there has been emphasis on the side effects of aspirin to the point of eroding our understanding of the utility of the agent. Serious side effects are important and they certainly should be considered by physicians prescribing high-dose aspirin therapy, but they are common because of the ubiquitous use of aspirin. Before discussing these side-effects, let me state my strong personal bias: There is no anti-inflammatory agent currently available that in terms of financial burden, pharmacological effectiveness, and side-effects compares favorably with aspirin. I would argue that when a new agent is marketed with utility no greater than aspirin and the claim of fewer side-effects, it behooves us to consider that it has taken decades to define aspirin's toxicities and that long intervals are relevant to the individuals for whom we are contemplating prescribing the new agent. These newer agents have a role - but



have not replaced aspirin as the drug of choice.

Symptomatic gastritis is the usual impediment to aspirin therapy. Acetylsalicylic acid, on contact with the mucosa, promptly induces erythema at least. Furthermore, even without clinical intolerance, high-dose aspirin will cause an increment in mean daily gastrointestinal blood loss. The simplest clinical maneuver to address this issue is to approach dietary management in all patients on high-dose aspirin therapy with a view to the gastritis they all have, increasing the dose gradually and administering it with meals. It is important to realize that almost all known anti-inflammatory agents of diverse structure - - glucocorticoids are a prime example - - share to some degree an ulcerogenic potential similar to that of aspirin. It can be postulated that the mechanism of the anti-inflammatory effect may be similar to the ulcerogenic effect.

There has been considerable effort expended in attempts to modify the structure of aspirin to provide an agent of comparable anti-inflammatory potency lacking gastrointestinal toxicity. I feel this has been futile to date.

Indomethacin is a relative

newcomer on the anti-inflammatory scene. Introduced slightly over ten years ago, it is the product of experimental pharmacological screening. Furthermore, it is structurally a unique agent - - an indole derivative. This is a useful and important drug, almost totally supplanting phenylbutazone in my practice. However, no controlled study has shown indomethacin to be superior to aspirin in rheumatoid arthritis. In view of this, the expense of the drug and our relatively short experience with the agent, I feel it is a second-line drug.

Glucocorticoids are the most potent anti-inflammatory agents currently available, but their use in rheumatoid arthritis and other rheumatic diseases is a very thorny issue. It is clear that they are very effective anti-inflammatory agents, a fact which in combination with their mood-elevating potential can result in dramatic palliation. A passage from a letter to five prominent rheumatologists from Dr. Philip Hench, dated February 24, 1949, will illustrate this:

"As you may recall, we have been trying for twenty years to identify the 'substance X' which is responsible for the striking remissions induced in rheuma-

toid arthritis by jaundice and pregnancy. At last we think we have identified it as a rare chemical, very small amounts of which have been prepared and made available to us. Since last September we have been studying intensively its physiological action and have administered it to about twelve patients with severe or moderately severe rheumatoid arthritis. The material has striking effects which provide relief almost as dramatically, if not as dramatically, as the effects of jaundice . . . in all patients, within a few days, there is a notable reduction of symptoms and improvement of function of muscles and joints."

The rest is history - - Dr. Hench's Nobel Prize and the widespread use of steroids in the management of rheumatoid arthritis. The short-term improvement in symptoms and function is as dramatic as Dr. Hench first described. However, with time the medical world came to realize that the time and dose related side-effects were so pervasive and of such magnitude that one disease, rheumatoid arthritis, was superseded by an equally debilitating and devastating disease - - exogenous Cushing's syndrome. The principle manifestations of exo-



genous Cushing's syndrome are all too familiar to us.

The death-knell for the enthusiasm for steroids was sounded when slowly it was realized that in spite of the dramatic reduction in inflammation, no evidence was forthcoming that destruction of joints was halted. The dilemma was compounded when it was realized that withdrawing the agent was met with tremendous patient resistance and protest! This is a complicated issue, as withdrawal of the drug is withdrawal of pain relief and mood elevation. Finally, withdrawal itself may provoke arthralgias.

It is very difficult to simply discard the most reliable and effective anti-inflammatory agent currently available. A consensus has evolved that there are "special cases" for whom systemic steroid therapy is indicated - - but the criteria are not uniformly defined. Leaving aside such extra-articular manifestations of rheumatoid arthritis as pericarditis with restriction, I find these "special cases" exceedingly rare! Only for the rare active rheumatoid patient who is well into the sixth decade of life do I feel systemic steroids is an option. Even here, I use the lowest effective dose and

usually can convince the patient to accept the compromise in relief resulting from alternate-day therapy.

As you are all well aware from the highly effective advertising campaigns that are blanketing our journals, filling our mailboxes and even reaching our patients ahead of us, a number of new non-steroidal anti-inflammatory agents have recently been released. This is just the beginning, as a large number of new agents are currently at various levels of evaluation and it is just a matter of time. Having just heard the sad saga of systemic steroids, we should all be cautious in our approach to using these agents. On the other hand, it is all too clear that we currently have no agent of any potency without one or several significant flaws. The magnitude of both the need and the market is all too obvious, and I do not wish to disparage the effort. Nonetheless, we clinicians have the difficult task of interpreting the carefully worded claims of the marketing teams and sifting through the statistical exercises provided in the literature. This is no mean task and all too often provides the headache for which the drug may be effective.

As I mentioned, Ibuprofen Motrin® has been sufficiently studied to satisfy the FDA and is now aggressively marketed. It is intriguing, I hope, that the only structural modification in the toxic parent compound necessary to produce ibuprofen is the introduction of a methyl group on the organic acid side chain! Nevertheless, no hepatotoxicity or major organ damage has been ascribed to this drug.

Ibuprofen, in animal experiments, is a potent anti-inflammatory agent. The clinical data are less clear, probably because of uncertainty as to the effective dose. I feel it is a fair overview that this drug has a potency similar to that of aspirin, only when used in high doses ranging from 1600 to 2400 mg. per day.

Like its parent compound, ibuprofen has the potential for peptic ulcer formation. Nonetheless, it is considerably better tolerated in terms of GI toxicity than aspirin - - as asserted in the advertising. Perhaps as many as half of the patients intolerant to aspirin will be tolerant to ibuprofen. This drug does not interfere with the clotting mechanism and probably has a role in conservative management, though it is my bias to use it sparingly until

greater clinical experience is in hand.

In reviewing the available analgesic and anti-inflammatory agents available, I have frequently alluded to cost-effectiveness. To illustrate my point, I phoned my corner drug store to obtain the price list. It is clear that maintenance therapy with aspirin wins hands down, costing some \$30 per year while the others approach \$180. I rest my case on these agents.

It is important to emphasize that none of the anti-inflammatory agents I have discussed has been shown to be truly anti-rheumatic. There is no evidence that they can impede or stop the erosive, destructive component of rheumatoid arthritis. There are only two agents currently available that have the proved potential to accomplish this - gold salts and cyclophosphamide - and both deserve our attention.

Organic salts of gold were widely employed in the treatment of tuberculosis early in this century. By 1930, following the observations of a number of astute clinicians, notably Forestier, it was employed in the management of rheumatoid arthritis. There was considerable controversy both to the anti-inflammatory effectiveness of this parenteral medication and the incidence of side-effects, which was clearly significant. The definitive study addressing these issues was a multi-center double-blind, controlled trial sponsored by the Empire Rheumatism Council in Great Britain and published in 1960. The study supports the

summary that while side-effects are significant and not infrequent, the drug can be used relatively safely.

Did it work? Using a large number of subjective and objective measures of function and inflammation, the study shows that patients treated with gold salt improved to a greater degree than controls. This difference was apparent at three months and persisted through 12 months. It must be emphasized that the control group also improved.

From personal clinical experience and from a review of the clinical drug trials, one can't help but be impressed by the effect of the "placebo." This is not to advocate sham treatment - rather to point out that a positive attitude on the part of the physician can do much to bolster the courage of the patient with such secondary gains as increased participation in conservative regimens, if not in the activities of daily living.

The Empire Rheumatism Council study could demonstrate no difference in the rate of progression in radiographic joint damage. However, in 1974, the results of a collaborative study performed by the Rheumatology Divisions at Baylor and the Henry Ford Hospital were published. The study differed from that of the Empire Rheumatism Council in that after the initial 20 weeks of injection of either gold salt or placebo, the intervention was continued monthly for two years. This study convincingly demonstrates that the mean progression rate of destruction was significantly slowed for the treated group.

I have developed an aggressive

approach to gold salts therapy only because I find data showing the drug can modulate progressive joint destruction impressive!

Who is a candidate for gold salt therapy? There is no uniform recommendation available in the literature. I must be certain that my patient has rheumatoid or psoriatic arthritis as the drug has nothing to offer in osteoarthritis and such rheumatoid variants as ankylosing spondylitis. It may be hazardous, if not useless, in systemic lupus erythematosus. The patient must have persistent disease activity in the face of conservative therapy for a prolonged period - at least six months. And I must see a radiologic documentation of progressive erosive disease - though I will accept very subtle changes. Finally the physician employing this agent has a mandate to attempt to detect side-effects early, most of which will reverse if the course of therapy is terminated.

The last agent I want to discuss is cyclophosphamide. If there is a rationale for the use of this drug, it was stated by Hamlet: "diseases, desperate grown, by desperate appliances are relieved." This drug, in high doses only, has been demonstrated to be anti-inflammatory and to favorably modulate the progression of erosive disease. Its side effects are numerous, among them bone marrow toxicity, alopecia, cystitis as well as bladder fibrosis and dysplasia, and sterility. In theory it is oncogenic - clearly it impairs host defense mechanisms, creating a target for serious sepsis. In short, cyclophosphamide

and not rheumatoid arthritis threatens the life-expectancy of the patient.

How desperate is desperate? The use of cyclophosphamide in articular rheumatoid arthritis is more than heroic. Furthermore the drug is not released by the FDA for this purpose, and guidelines for its usage published by the American Rheumatism Association include the mandate for therapeutic protocols approved by peer group review. I am in full accord.

When I began to formulate this article, I had several goals in mind. Principally, I wanted to communicate a sense of enthusiasm - - that we as clinicians could intervene with significant impact in the course of a disease that, neglected, becomes a prolonged nightmare. It was my intent to demonstrate that rheumatoid arthritis is the calling of the generalist at the bedside - - where the exactness of the clinical laboratory in no way supplants the judgment,

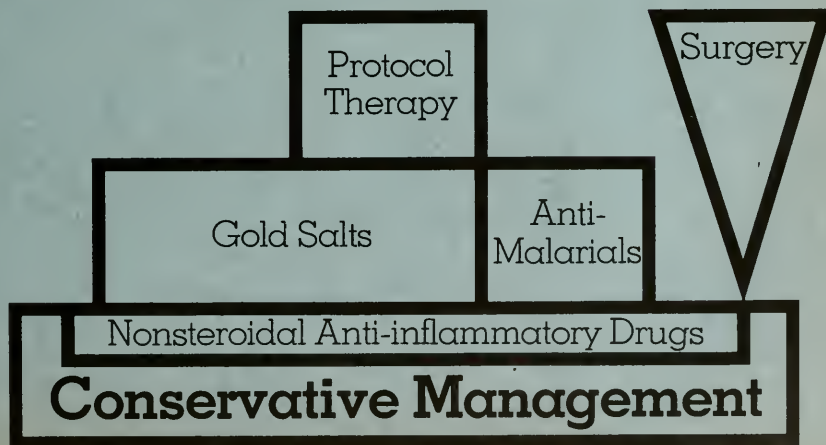
compassion, and common sense of the physician. Francis Weld Peabody, the great Boston clinician of fifty years ago, put it succinctly, "the art of patient care is caring for the patient."

If we look back over the past few pages, I have almost buried this simple message in a recitation of drug and drug-trial data. This is no longer avoidable; it represents the paradox of applying the scientific method at the bedside of the individual patient whose illness has yielded only begrudgingly to the inroads of therapeutics. We must perform controlled clinical trials and we must read the results in terms of incidence and fractional effects in order to establish fact - - yet we treat only the numerators.

The state of the art forces us to structure intervention based on our evaluation of the individual patient and the role we judge for the available tools in that particular patient's case. Dr. Charley Smyth of Denver has advocated the concept of a pyramid of inter-

ventions in the case of the patient with rheumatoid arthritis. A similar scheme is illustrated in the figure below. This is a useful conceptual tool. Importantly, the pyramid builds sequentially during the course of the individual patient's illness and may well be truncated or very lopsided. These are issues of judgment.

To manage rheumatoid arthritis in isolation is a trying experience. Issues of clinical judgment are frequent and often complicated by infectious desperation. The availability of the consultative support and experience of colleagues focusing their clinical skills on rheumatoid arthritis permits more objective and efficient management of this disease. This, indeed, is one of the prime motivations for the establishment for four Arthritis Consultation Clinics about the state by our Division - - to facilitate interchange with physicians in those communities relevant to the individual patient.



Of Chalk, Classrooms, and clinics

The Burroughs Wellcome Fund has presented the School of Medicine a \$100,000 Special Award in Clinical Pharmacology. The grant will be used for the development of a new Division of Clinical Pharmacology. **Paul Munson**, Chairman of Pharmacology, worked closely with **Dean Christopher C. Fordham III** and **Robert Ney** in planning the Division, an expansion of the existing division. The program will be based in the Department of Pharmacology and will offer all clinical faculty an opportunity to participate in its activities.

William Grady Thomas is working with Larry H. Royster from N. C. State on a study of how loud noises affect hearing. They will analyze background data on industrial employees and will then evaluate the effectiveness of various hearing protection programs. The study is funded by a \$47,400 grant from the Rockefeller Foundation. Dr. Thomas is Director of the Hearing and Speech Center at NCMH and is an Associate Professor of Surgery.

Archie Johnson, Assistant Professor of Pediatrics, has been named Chairman of the North Carolina Chapter of the American Academy of Pediatrics.



Cary W. Cooper.

Associate Professor of Pharmacology, has received a grant from the National Institute of Arthritis, Metabolism and Digestive Diseases. The subject of his research is "Calcium, Calcemic Hormones and Gastrin."

Aldo Rustioni has been named Associate Professor of Anatomy and Physiology. He has been a Visiting Associate Professor at the University since 1973. He received the M.D. degree from Parma Medical School in Italy.

The James Picker Foundation has selected **Richard L. Clark** as a Picker Scholar. The Foundation awards between ten and fifteen \$40,000 four-year scholarships each year to help universities and research institutions "provide enhanced opportunities in research and self development for promising young staff members." Dr. Clark is an Associate Professor of Radiology and Director of the Diagnostic Radiologic Research Laboratory.

John T. Gatzky, Jr., Associate Professor of Pharmacology, has received a grant from the National Heart and Lung Institute to study airborne metals and lung permeability. He was also a speaker at a Ciba Symposium on Lung Liquids held in London, England, April 22-23.

The Josiah Macy, Jr. Foundation has named **John H. Schwab** a Faculty Scholar for 1975-76. He is one of thirty scientists chosen to participate in the program, established two years ago to "recognize and reward excellence in academic medicine." A Professor

of Bacteriology and Immunology, he will study bacteria's influence on aging at the Institute for Experimental Gerontology in The Netherlands.

Colin G. Thomas, Jr., Professor and Chairman of Surgery, participated in the University of Mississippi's second annual Postgraduate Surgical Forum in March. He presented two papers on the thyroid.

David L. Raney, Director of Medical Television and Instructor in Communications, gave the keynote presentation and was guest consultant at Biocommunications West, February 15-17, in Monterey, California. His multimedia presentation was entitled "Instructional Product Development: Constraint and Challenge."

William H. Pearlman has just received a contract from the National Cancer Institute for research on mammary gland responsiveness to multiple hormones. He is a Professor of Pharmacology.

Peter J. K. Starek has been chosen for membership in the Society of Thoracic Surgeons. He is an assistant Professor of Cardiothoracic Surgery.

Norman A. Coulter, Professor of Biomedical Engineering and Mathematics, has been named Associate Editor of ASC Forum, the journal of the American Society for Cybernetics.

Thomas Curtis, Chairman of the Department of Psychiatry, and **Seymour Halleck**, Professor of Psychiatry, participated in the second annual Spring Transactional Analysis Conference sponsored by the Southeast Institute. They served on

panels dealing with family therapy and the use of transactional analysis in the prison system, respectively. The conference was held in Raleigh in March.

William D. Mattern, Assistant Professor of Medicine, has been named a Teaching Scholar of the American Heart Association. The Association awards two scholarships each year to encourage qualified medical teachers to devote their time to teaching and improving instructional methods. Dr. Mattern will receive an average of \$15,000 a year for the next five years.

The Department of Obstetrics and Gynecology has appointed three new assistant professors. **Lamar E. V. Ekbladh** has been at the National Medical Center since 1973. He completed his residency here after receiving the M.D. degree from Yale.

Guy Photopoulos has been Chief of the Gynecology Service at Brooke Army Medical Center and Clinical Assistant Professor at the University of Texas Medical School since 1973. He received both the undergraduate and M.D. degrees from the University of Illinois. **Leslie A. Walton** has been in private practice in Charlotte. He is a graduate of Howard University and the Downstate Medical Center in Brooklyn.

Charlene M. Nelson, Associate Professor of Physical Therapy, has been appointed Chairman of the Editorial Committee for Physical Therapy, the journal of the American Physical Therapy Association. She is Vice President of the North Carolina Physical Therapy Association.



Dean Christopher C. Fordham and Dean Emeritus W. Reece Berryhill admire Berryhill Hall's latest addition. Donated by the School of Medicine, the plaque hangs on the first floor of the basic sciences building.

War II, he joined the Columbia faculty in 1946 as Assistant Professor of Radiology. He left there in 1952 to join the UNC faculty. He returned to Columbia in 1964.

A native of New Bern, he was co-author of "Diagnostic Neuroradiology," the primary graduate textbook in the field of x-ray examination of the brain and spinal cord.

He made his home in Ridgewood, New Jersey, at the time of his death. Surviving are his wife, the former Ruth Ratcliffe; two sons, Ernest III and William; and a daughter, Janet Brown.

The following faculty members presented papers at the 1975 meeting of the Federation of American Societies for Experimental Biology in Atlantic City in April: **Donald E. McMillan**, Associate Professor of Pharmacology; **Lorcan O'Tuama**, Assistant Professor of Medicine; **Frederick Eldridge**, Professor of Physiology; **Linus Shen**, Instructor in Biochemistry; and **Patricia D. Frazier**, Instructor in Biochemistry.

Dean Christopher C. Fordham III has been elected to the Executive Council of the American Association of Medical Colleges. As a representative from the Council of Deans, he will also serve on the Council of Deans Administrative Board.

Ernest Harvey Wood

, first Chairman of the Department of Radiology, died February 11 in New York City. At the time of his death, he was Professor of Radiology at Columbia University College of Physicians and Surgeons and Director of Radiology Services at the Neurological Institute of the Columbia Presbyterian Medical Center.

Dr. Wood graduated from Duke University and received his medical degree from Harvard School of Medicine. After serving in the Army during World

Matching Day 1975

Due to a new Federal law governing students' right to privacy, we cannot print students' names in this list.

Alachua Hospital
Gainesville, Florida
2 Family Medicine

Baroness-Erlanger Hospital
Chattanooga, Tennessee
1 Rotating

Boston City Hospital
Boston, Massachusetts
1 Surgery

Charlotte Memorial Hospital
Charlotte, North Carolina
1 Ob-Gyn
1 Family Medicine

Children's Medical Center
Dallas, Texas
1 Pediatrics

City of Memphis Hospital
Memphis, Tennessee
1 Rotating

Dartmouth Affiliated Hospitals
Hanover, New Hampshire
1 Pediatrics
1 Medicine

D. C. General Hospital
Washington, D. C.
1 Medicine

Duke University Medical Center
Durham, North Carolina
1 Family Medicine

Eugene Talmadge Memorial Hospital
Augusta, Georgia
1 Ob-Gyn
1 Medicine

Good Samaritan Hospital
Cincinnati, Ohio
1 Medicine

Greenville General Hospital
Greenville, South Carolina
1 Family Medicine

Hershey Medical Center
Hershey, Pennsylvania
1 Medicine

Highland Hospital
Rochester, New York
1 Family Medicine

Jacksonville Educational Programs
Jacksonville, Florida
2 Medicine

Johns Hopkins Hospital
Baltimore, Maryland
1 Ob-Gyn
1 Psychiatry

Letterman General Army Hospital
San Francisco, California
1 Flexible
1 Anesthesiology

Massachusetts General Hospital
Boston, Massachusetts
1 Pediatrics

Medical Center Hospital of South Carolina
Charleston, South Carolina
1 Family Medicine
1 Surgery
1 Ob-Gyn
1 Pediatrics

Medical College of Virginia
Richmond, Virginia
1 Surgery

Mount Sinai Hospital
New York, New York
1 Pediatrics

Naval Regional Medical Center
Oakland, California
1 Anesthesiology
1 Surgery

Naval Regional Medical Center
San Diego, California
1 Orthopaedic Surgery

Naval Regional Medical Center
Bethesda, Maryland
1 Surgery

Naval Regional Medical Center
Philadelphia, Pennsylvania
1 Psychiatry
1 Medicine

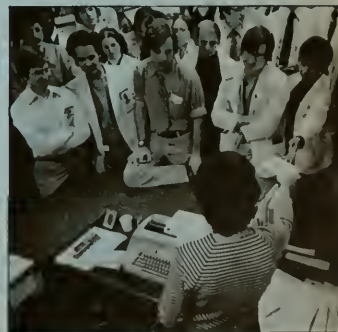
Naval Regional Medical Center
Portsmouth, Virginia
1 Pediatrics

New England Deaconess Hospital
Boston, Massachusetts
1 Surgery

New Hanover Memorial Hospital
Wilmington, North Carolina
2 Ob-Gyn
1 Rotating

Norfolk General Hospital
Norfolk, Virginia
1 Family Medicine

North Carolina Baptist Hospital
Winston-Salem, North Carolina
1 Pediatrics



North Carolina Memorial Hospital
Chapel Hill, North Carolina
5 Medicine
2 Ob-Gyn
2 Surgery
2 Family Medicine
4 Psychiatry
1 Pediatrics
3 Rotating
2 Anesthesiology
2 Radiology

Presbyterian University of Pennsylvania
Medical Center
Philadelphia, Pennsylvania
1 Medicine

Roanoke Memorial Hospital
Roanoke, Virginia
1 Family Medicine

San Diego County University Hospital
San Diego, California
1 Pediatrics

William Shands Teaching Hospital
Gainesville, Florida
2 Pediatrics
3 Surgery
1 Anesthesiology

Strong Memorial Hospital
Rochester, New York
1 Rotating

Texas Medical Branch Hospital
Galveston, Texas
1 Family Medicine

Union Memorial Hospital
Baltimore, Maryland
1 Medicine

University of Alabama Medical Center
Birmingham, Alabama
1 Pediatrics

University of Arizona Affiliated
Educational Program
Tucson, Arizona
1 Medicine

University of Chicago Clinics
Chicago, Illinois
1 Medicine

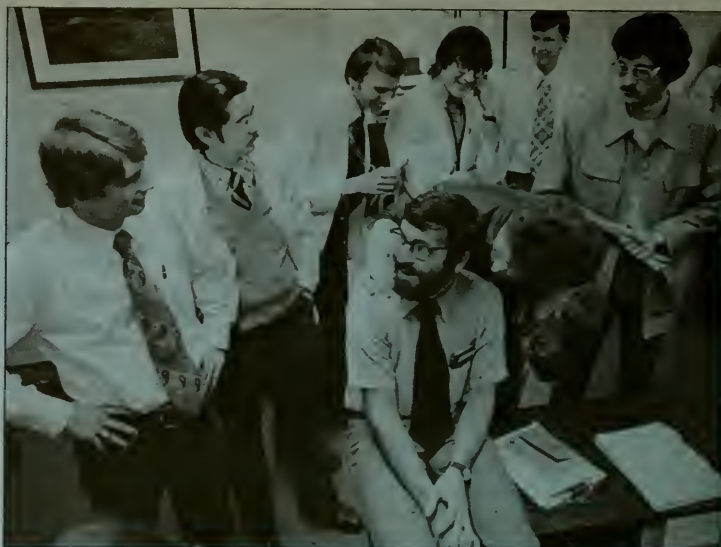
University of Colorado Affiliated Hospital
Denver, Colorado
1 Surgery

University of Connecticut
Affiliated Hospital
Hartford, Connecticut
1 Psychiatry

University of Illinois Affiliated Hospital
Chicago, Illinois
1 Surgery

University of Iowa Hospital
Iowa City, Iowa
2 Surgery

University of Maryland Affiliated Hospital
Baltimore, Maryland
2 Family Medicine



University of Oregon Medical Center
Portland, Oregon
1 Family Medicine

University of San Antonio Teaching Hospital
San Antonio, Texas
1 Medicine

University of Texas Southwestern
Affiliated Hospital
Dallas, Texas
1 Medicine

University of Utah Affiliated Hospital
Salt Lake City, Utah
1 Surgery
1 Pediatrics

University of Virginia Hospital
Charlottesville, Virginia
1 Medicine

University of Washington Affiliated Hospital
Seattle, Washington
1 Medicine
1 Psychiatry

Vanderbilt University Affiliated Hospital
Nashville, Tennessee
1 Ob-Gyn
1 Medicine

Wilford Hall USAF Medical Center
San Antonio, Texas
1 Anesthesiology

Charles S. Wilson Memorial Hospital
Johnson City, New York
1 Family Medicine

Womack Army Hospital
Fort Bragg, North Carolina
1 Family Medicine

In Memorium

Reported April 1974 - March 1975

Harry Smith Andrews '27
Glenn Eben Best '35
John Matthew Cook, Jr. '28
Cleon Walton Goodwin '32
Edward Genair Goodman '38
John Roy Hege, Sr. '13
George W. Heinitch '30
Ira H. Hurt '17
William Herbert Kibler '07
William Frank English Loftin '24
Archibald Kelly Maness '26
Thomas Lacy Morrow, Jr. '43 March
John William Roy Norton '26
William J.B. Orr '18
Fred Marion Patterson '22
Richard B. Rankin '15
Asa Mark Scarborough '31
Hilliard Vincent Staton '25
Hugh Alfred Watson '28
Ivie Alphonso Ward '05
Nathan A. Womack '22

"A Hard Combination to Beat"

Like to dramatically increase service to your patients? Drastically improve the efficiency and economics of your practice and your office? Give yourself the greatest amount of comfort and pleasure in your practice? Increase your time to do the things you always wanted to do?

A private pediatric practice, in continuous operation for half a century, has come up with innovative scheduling that enhances the delivery of medical care while being more efficient, more productive and less grueling for physicians and staff.

Stewart S. "Brick" Saunders joined the Burrus Clinic of High Point as a pediatrician in 1925. He was joined by Kenneth B. Geddie in 1930, and they were joined by John F. Lynch, Jr. just after World War II. After the High Point Medical Center was completed in 1955, the group operated as the Infant and Child Clinic. The partnership took in John D. Bridgers in 1962 in preparation for Dr. Saunders' retirement the following year.

During the few months prior to Dr. Saunders' retirement, it became evident that four physicians could use the clinic's facilities just as readily and more efficiently than could three. The office had been designed with central administrative, nursing, laboratory and first aid facilities. An office and three examining rooms were provided for each of the three physicians.

In 1965 William N. Michal, Jr. became a permanent fourth physician in the group. With four physicians, each was able to take a full weekday off each week and one three-day weekend every four weeks. The extra practice attracted by another physician and the more complete utilization of available clinic space more than compensated for the liberalized work schedule.

The new practice rapidly matured and the older practices thrived. This growth overloaded facilities during the day, and night call grew hectic from telephone traffic and patients needing to be seen. Another problem of growth was the deluge of patients, many with acute illnesses and accidents that defied anticipatory appointments. The waiting room was almost constantly congested, waiting time was prolonged and uncomfortable due to crowding, and the pressure was intense on

receptionists and nurses, who had to deal with an unending throng of understandably impatient patients and parents. As plans were being made for purchasing additional office space, another approach suggested itself that eventually solved many of these problems.

We decided to keep the office open for twelve continuous hours each weekday - - from 8:00 a.m. to 8:00 p.m. - - utilizing essentially the same number of physician-office hours as before. One physician is scheduled from 8:00 a.m. until 2:00 p.m. A second physician works from 9:00 a.m. until noon and from 2:00 p.m. to 5:00 p.m. He also has night call from 8:00 p.m. to 8:00 a.m. A third physician works from 2:00 p.m. until 8:00 p.m. the first day, a split shift from 9:00 a.m. until 5:00 p.m. with night call the second day, and from 8:00 a.m. until 2:00 p.m. the third day. On the fourth day, he is off-duty. This works out to be a 48-hours-on/48-hours-off rotation on weekdays.

The weekends are adjusted so that each physician has one duty weekend, one 48-hour weekend break, one four-day weekend break and one 3½-day weekend break every four weeks. This was accomplished by reducing the total time scheduled for physi-





cians in the office only two hours per week.

The basic premise is that four men run a three-man office. There are never more than two doctors in the office simultaneously, and one man is always off. At his pleasure, he uses this time for recreation, post-graduate education, hospital work, etc., but he has no responsibility for office coverage on his time off. The plan

has been in use about eighteen months and has been extremely beneficial for everyone concerned.

The first person to benefit is the patient. High Point is a center of furniture and hosiery manufacturing. Since both industries employ large numbers of women, taking ill children to the doctor outside working hours is a necessity for parents and a burden for physicians. Now service is more

available, for the office is open, with a physician on duty, 70 hours each week instead of the previous 40 hours.

Obviously, such a plan enables a patient to have great opportunity and flexibility in pediatric service. Starting at 8:00 a.m., the doctor who was on call the previous night can give immediate service to any sick patient for whom a telephone call sufficed the night before. This allows us to settle the problems a number of patients may have before school or work.

We no longer have to put off parents who are sincerely worried about their children. The critical hours are those just after the mother and father get home and during the dinner hour. With this plan there is still an opportunity to get a child treated before the office closes. This has been one of the most dramatic changes in our way of life since the system was instituted, and the industrial community thinks this is great. It enables many parents not to miss work when their children have appointments with the doctor or when they are acutely ill.

Service is also more pleasant. The daily patient flow is dispersed over twelve hours rather than jammed into six. The ability to run on some type of logical appointment schedule has been much improved. The waiting room is unrecognizable -- people no longer have to crowd in. The nurses and office personnel, who work a schedule similar to the doctors, have accepted the program enthusiastically. A tense, hectic atmosphere has been converted

into a much smoother and more enjoyable working climate.

The increase in economy and efficiency is one of the major advantages of this plan. In office space that used to be congested we have added personnel and services. One examining room cluster is always empty and is now used by a part-time clinical psychologist. This move not only has helped defray expenses but has enhanced greatly the quality of service the practice offers.

The deluge of telephone calls that aggravated the physician on call after 5:00 p.m. have been converted largely to office visits, thus changing a frustrating free service into a satisfying revenue-producing service. Also, when a physician is absent on a scheduled workday, the physician scheduled to be off takes the shift. On the old schedule, his appointments simply would have been cancelled. With regular vacations and other absences, the new plan is roughly equivalent to adding one-third of a physician to the staff.

All the personal benefits from this system would be impossible to write down -- the time the doctor has with his family, the time he is able to take for meetings, the time he is able to do other things that pile up while he is having office hours. Life is less frantic, and we feel we are doing a better job for many people.

Better satisfied patients and medical office personnel, physicians working more but having it seem less, and the conversion of dead space and non-revenue time to increased profits add up to a hard combination to beat.

PHYSICIAN	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
FIRST WEEK							
Lynch	2-8	9-12 2-5 8	8-2		2-8	9-12 2-5	9-12
Geddie	9-12 2-5 8	8-2	9-12 2-5 8	2-8	9-12 2-5 8	8-2	
Michal		2-8	2-8	8-2			
Bridgers	8-2			9-12 2-5 8	8-2		
SECOND WEEK							
Lynch	8-2	9-12 2-5 8	8-2	9-12 2-5 8	8-2	9-12 2-5	9-12
Geddie	2-8	8-2		2-8	2-8	8-12	
Michal	9-12 2-5 8	8-2			9-12 2-5 8		
Bridgers		2-8	9-12 2-5 8	8-2			
THIRD WEEK							
Lynch		2-8	9-12 2-5 8	8-2			
Geddie	8-2		2-8	9-12 2-5 8	8-2	9-12 2-5	9-12
Michal	2-8	9-12 2-5 8	8-2		2-8		
Bridgers	9-12 2-5 8	8-2		2-8	9-12 2-5 8	8-12	
FOURTH WEEK							
Lynch	9-12 2-5 8	8-2		2-8	9-12 2-5 8	8-12	
Geddie		2-8	9-12 2-5 8	8-2			
Michal	8-2		2-8	9-12 2-5 8	8-2		
Bridgers	2-8	9-12 2-5 8	8-2		2-8	9-12 2-5	9-12

by Christopher C. Fordham III, M. D.

126 MacNider

Alumni Day this spring was a joy - we had good attendance, good fellowship and an informative meeting. With Distinguished Service Awards, we honored five great people, each of whom has served society and the School of Medicine in different and important ways, directly or indirectly.

The relationship between alumni and alma mater is a complicated one, both individually and collectively. It tends to have all of the ambiguities and ambivalences of intense person-to-person relationships. Often it may involve a love-hate complexity where part of what the institution stands for is embraced with fervor and part rejected with anguish. The University of North Carolina at Chapel Hill and its medical school represent no exception. We have devoted alumni across the state, nation and world, and we have among their number those who wish the institution were more as they remember it or want it to be. Then we (and all institutions) have alumni who are apathetic about the School and the University, who, in the vernacular, "couldn't care less".

These are trying times for all of us, in all segments of an uncertain society. As a colleague of mine said, after a disastrous day, "I'm going home and read Thomas Paine ('These are times that try men's souls') - No, I'm going to read the New Testament". Although spoken facetiously, the values of the past perhaps need more reflective attention today.

We need our alumni. Efforts to "level" this great University, certainly among the most precious of North Carolina's possessions,



continue. The state needs and deserves a great university and a great medical center. We have them now, with ever-increasing productivity and promise. You, the Alumni, share the responsibility for seeing that this institution is sustained, and we who are physically in stewardship here and now promise you our best efforts.

Alumni Day 1975

At the Annual Meeting of the Medical Alumni Association, Dean Christopher C. Fordham III told alumni of the continuing concern for providing adequate medical training for the student as well as maintaining quality service for hospital patients. Approximately 300 attended the March 27 meeting.

In addresses to the luncheon and Visiting Committee meetings, Dean Fordham outlined the progress made throughout the medical center during the past year. There are currently 300 attendings, 300 house staff and 140 medical students. The new clinical sciences building is near completion, and the bed tower is expected to be completed by June.

The Dean also described new programs in the School. Under the auspices of a grant from the Robert Wood Johnson Foundation, the School now has a Clinical Scholars Program. Funding for the Cancer Center program and a new Division on Oncology is anticipated shortly. The Dean announced plans for submitting a proposal for a family health center building, with approximately \$2.9 million being sought from the Federal Government and an additional \$1.9 million being sought from private contributions.

Dr. William Easterling, Chief of Staff of NCMH, told the Visiting Committee of recent changes in the hospital. These include a



loose-leaf patient referral directory for physicians, which lists all clinics and physicians at NCMH with their phone numbers, and a WATS line for incoming referral calls.

This year's matching program went well, with over 50 percent of the students receiving their first choice for an internship or residency. Approximately 80 percent received one of their first three choices. Twenty-two students will be interns in medicine, 17 each in family medicine and surgery, 13 in pediatrics, 9 in Ob-Gyn, 8 in psychiatry, 6 in anesthesiology, 2 in radiology and 8 rotating.

Dr. Oscar L. Sapp, Associate Dean for Continuing Education and Alumni Affairs, mentioned administrative changes made in the Alumni Office during the past year and announced plans to extend Alumni Day to two days next year.

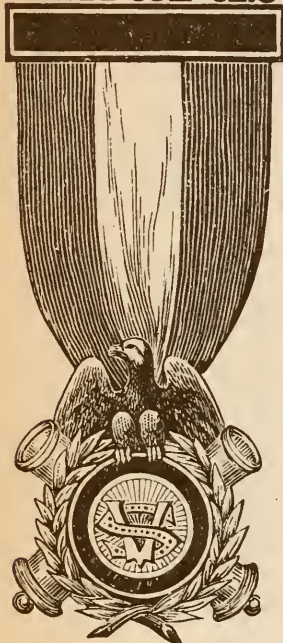
Dr. Julian Albergotti, President of the Medical Alumni Association, reported on the Loyalty Fund Drive for 1974. With contributions slightly less than last

year, he expressed the hope that alumni would support the drive during the coming year.

At the Annual Alumni Banquet, Dr. Albergotti introduced the new President of the Alumni Association, Dr. G. Reginald Tucker, '55, of Henderson. John L. McCain, '50, of Wilson is President-Elect, John L. Hazell, '56, of Asheville is Vice President, William B. Blythe, '51, of Chapel Hill is Secretary, and Palmer F. Shelburne, '55, is Treasurer.

Newly elected Councillors are Robert Lee West, '59, of Greenville (District III), Rose Pully, '49, Kinston (District V), Noel McDevitt, '64, Chapel Hill (District X), G. Thomas Wood III, '59, High Point (District XII), Wesley Grimes Byerly, Jr., '50, Hickory (District XV), and Alfred W. Hamer, Jr., '58, Morganston (District XVI). In-State Councillors-at-Large are Neil C. Bender, '63, Pollocksville, and Sellars L. Crisp, '60, Greenville. Out-of-State Councillor-at-Large is Julian W. Selig, '59, Norfolk, Virginia.

Distinguished Service Awards



Dean Christopher C. Fordham III presented Distinguished Service Awards to five people at the Annual Alumni Banquet. Mrs. Normal Connell Berryhill, Dr. David Sanford Citron, Rep. Lunsford Richardson Preyer, Dr. Rose Pully and Dr. Charles Durward Van Cleave received the School's highest honor.

Mrs. Berryhill was cited for her four decades of service to the University, the School of Medicine and the community. The wife of Dean Emeritus W. Reece Berryhill, she was instru-

mental in organizing both the North Carolina Memorial Hospital Auxiliary and the University Woman's Club, of which she was the first president. The Family Room in the emergency area of the hospital bears her name in recognition of her work with the hospital auxiliary and volunteer service. Before her marriage, she was Dean of Girls at Central



High School in Charlotte. She was the first to hold such a position in the North Carolina public school system.

Dr. Citron, '43, was recognized for his outstanding work with the postgraduate teaching program at Charlotte Memorial Hospital. Currently director of the family practice residency program at the hospital, he was founding member of The Charlotte Medical Clinic. He also

served as chairman of internal medicine at Charlotte Memorial for two years. He and a colleague were instrumental in establishing Charlotte's Neighborhood Medi-



cal Clinic, planned to serve those who otherwise would not have access to medical care.

Rep. Preyer, U. S. Congressman from the sixth district of North Carolina, was honored for playing "a major role in shaping federal legislation affecting our system of health care delivery and health professional education." As a member of the Subcommittee on Public Health and the Environment, Congressman Preyer's efforts have been significant to North Carolina's Area Health Education Center (AHEC) Program.

Dr. Pully, '49, was presented the award in recognition of her service to the people of North Carolina and Lenoir County. She was instrumental in organizing a mental health clinic in Kinston eight years ago and, as chairman of the area board of mental



health, worked to develop it into one of the best mental health clinics in the state.

Dr. Van Cleave, an Emeritus Professor of Anatomy, was honored for his 31 years of teaching medical students. A previous winner of the Basic

Science Teaching Award, he conducted investigations in experimental embryology, completed a definitive study of venous valves and pioneered in studies employing radioactive substances. He spent two years as a traveling consultant to the Atomic Energy Commission, an agency which also commissioned him to write two scholarly books summarizing the biologic effects of radiation.



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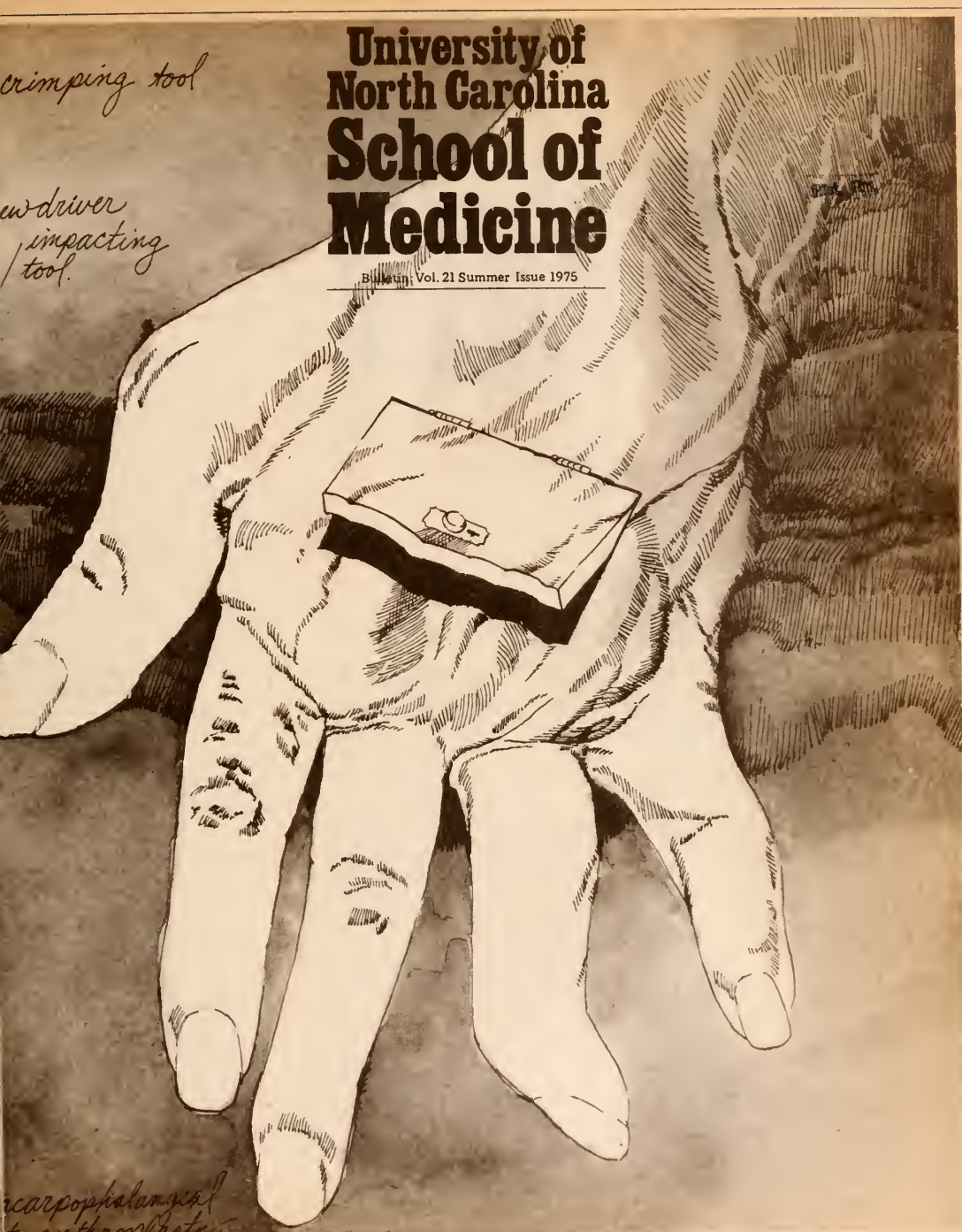
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University of North Carolina School of Medicine

Bulletin, Vol. 21 Summer Issue 1975



In this issue are a couple of firsts — both articles were written by alumni and both were volunteered by their respective authors. That's the kind of interest we really appreciate. A generous word of thanks to William H. Bowers and E. Ted Chandler!

Dr. Bowers' article touches on the surgical treatment of arthritis. After reading Dr. Hadler's article in the Spring Bulletin, Dr. Bowers suggested we show the flip side of arthritis management. Since he and Dr. Hadler work closely together, we thought it appropriate. Hope this gives you a better perspective.

If any of you are getting late summer wanderlust, read Dr. Chandler's article. He occasionally takes a break from his busy practice to tackle health problems in Africa. Not only does he find unusual settings for medical practice, he also picks up some surprising info on local customs.

Our biggest news of the summer is the establishment of a \$1.2 million Cancer Research Center at the School of Medicine. Dr. Joseph S. Pagano of the Departments of Medicine and Bacteriology and Immunology will direct the Center's research efforts.

Looking to the fall — there are many activities planned for you this year. You will get an early-bird announcement of some of the happenings in this issue. These include an expanded Loyalty Fund drive and an all new format for Alumni Day. So mark your calendars and try not to miss a thing!



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University of North Carolina School of Medicine

Bulletin: Vol. 21 Summer Issue 1975

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Some instruments used
for **Prosthetic Insertion**



crimping tool



screw-driver
impacting
tool



holding device



metacarpophalangeal
joint arthroplasty

Arthritis: The Cutting Edge

By William H. Bowers, M.D. '64

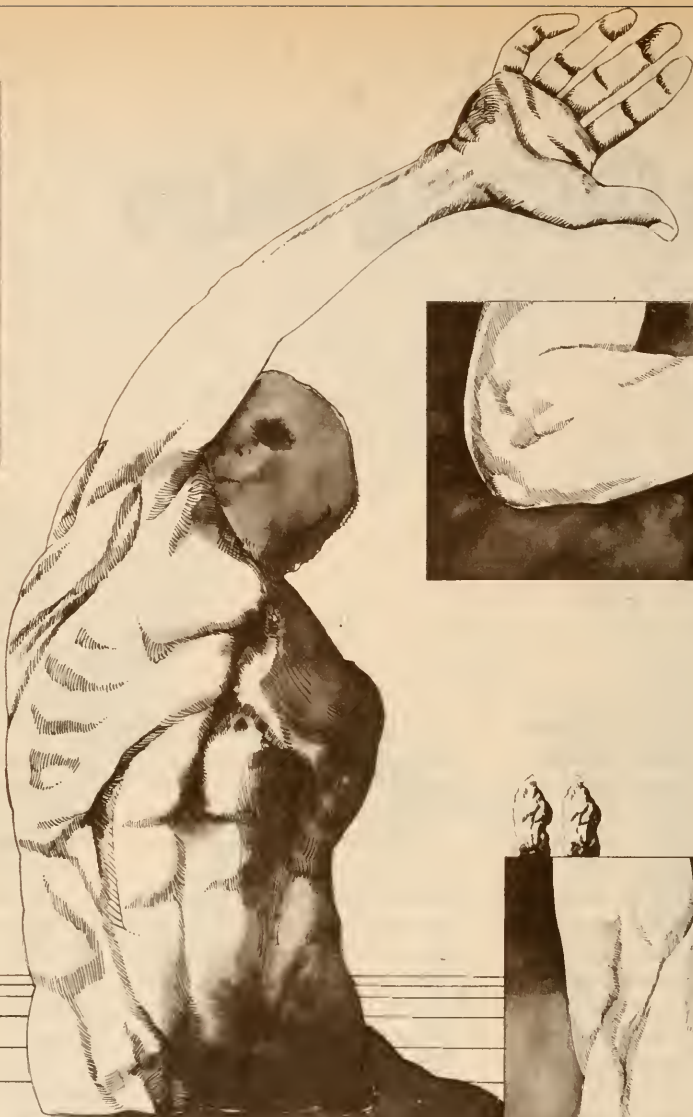
Patients with rheumatoid arthritis have a systemic disease which follows an unpredictable course and varies in response to both medical and surgical efforts. Despite the continuing thrust of the immunological effort to discover the pathogenesis and, hopefully, a chemical solution to the disease process, it remains largely unchecked by all current modes of pharmacologic therapy, with the possible exception of gold salts. Medical management serves primarily to modulate symptoms while the majority of surgical procedures now utilized are directed toward reconstruction of the devastated joint and its powering mechanism.

Such an appraisal is not as dismal as it might appear. Medical options present today were not available in the pharmacologic

armamentarium thirty years ago. The surgical literature today burgeons with new and more effective methods of joint reconstruction. Further optimism is engendered by the increasing involvement of specialists such as physical therapists, occupational therapists, orthotists, visiting nurses, social workers and orthopaedists.

To consider the arthritic process from a surgical standpoint, one might reduce the mechanism of the upper extremity to its very basics. Consider the shoulder as a mobile base joint from which the upper extremity can be positioned in almost 360° of global motion. Muscles of the shoulder girdle provide the power for this joint, whose stability depends on these muscles and the glenohumeral ligament. The elbow provides a mech-

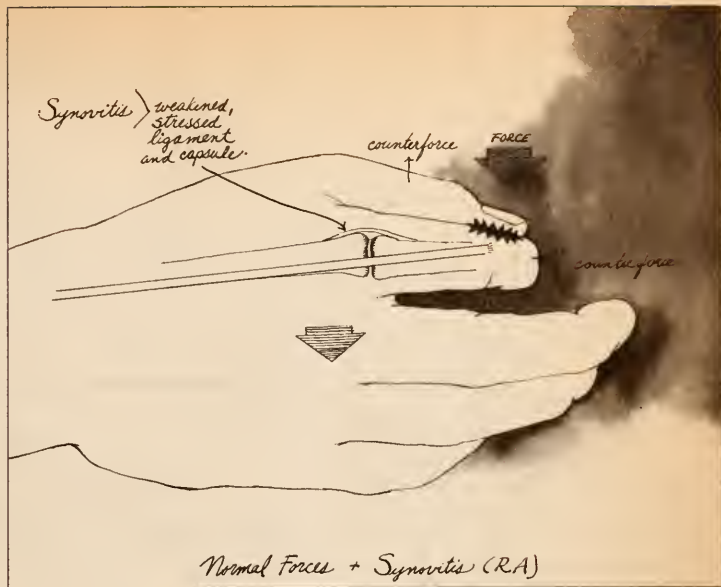
anism for varying the length of the upper extremity in order to bring objects nearer to one's pocket or mouth or to perform skilled functions at selected distances from the body. It is powered by the muscles of the arm, mainly the biceps and triceps, along with forearm flexors and extensors. The wrist joint is another locus of global motion, allowing final positioning of the hand. The palm and its opposable thumb metacarpal provide for the basics of grip, grasp and release while the extensions of the palm (the fingers and the thumb) provide the final element required for the skillful (and dexterous) use of the upper extremity. The upper extremity then consists of a series of bones connected by a series of joints. Static joint stabilization is



provided by close tolerance joints, surface structure and ligamentous integrity. Dynamic stability is provided by positioning musculotendinous units overlying each joint.

The pathophysiology of joint destruction may be understood in this context. The target organ for the rheumatoid process is the synovium. As synovium swells, the overlying ligaments, capsule and other supporting structures of the joint are stretched. Articular surfaces are damaged by the chemical components of the chronic inflammatory process and by pannus with its erosive activity in the subchondral area. As the process continues and the upper extremity must continue to function, the affected joint begins to deform as relatively normal overlying musculotendinous units continue to power it. The intercalated system begins to collapse. Collapse-type deformities are radial deviation of the wrist, ulnar deviation of the fingers, flexion and subluxation of the MP joints, and the common boutonniere and swan-neck deformities of the fingers. Since musculotendinous units usually overlie several abnormal joints, one disease element complicates the second, the second complicates the third, etc.

In the past, muscle spasm and muscle weakness have been emphasized as causes of deformity. In my experience there is very little if any spasm to be observed in the rheumatoid hand. Electromyographic studies have corroborated this opinion. Observed weakness is caused by changes in the joints which put musculotendinous units at a mechanical disadvantage. These units restored to



their normal anatomic position again function with power. In addition, nerve compression (as in the carpal tunnel syndrome) tendon rupture, flexor tendon triggering and pain contribute significantly to weakness.

The objectives of surgical intervention in the rheumatoid extremity are the relief of pain, the preservation of function or its restoration, and the prevention of deformity or its correction. The means by which these objectives are pursued are outlined in Table 1. Table 2 further characterizes these procedures in relation to the stage of the disease in which each is most applicable.

Prophylactic measures, especially joint synovectomy, have met with mixed enthusiasm by both surgeons and rheumatologists. Carefully controlled studies of the value of synovectomy have not been published. Immunologic changes considered beneficial have been demonstrated following synovectomy of the knee, but no comparable studies are available on the upper extremity. The reasons for this are multiple — arthritis is a cyclical disease which has an undetermined course at its onset and may not respond well to medical therapy. This does not prompt early referral for synovectomy. If a procedure is to be truly prophylactic, it must be performed early — at the time the initial synovitis is apparent. Since it is usually performed after ligamentous, tendonous, osseous and cartilagenous changes have taken place, prophylactic benefits, of course, do not accrue. It is futile to perform synovectomy late with the intention of delaying progres-

Table 1	
Surgical Procedures in Rheumatoid Hand Surgery	
Procedure	Where
Synovectomy	MPJ, PIPJ, Wrist
Tenosynovectomy	Dorsal, Volar (Palmar, Digital)
Tendon Surgery	Relocation, Anastomosis
Arthrodesis	Digital, Thumb, Wrist
Arthroplasty	MPJ, PIPJ, CMJ, Wrist

Table 2	
Procedure According to Disease Stage	
Disease Stage	Procedure
Prophylactic	Synovectomy of Joints Tenosynovectomy Carpal Tunnel, Trigger Finger Release
Reparative	Tendon Repair, Transfer, Carpal Tunnel Release
Reconstructive	Arthroplasty, Arthrodesis, Contracture Release Tendon Realignment

sion of local disease. It is possible, however, to consistently gain the value of local pain relief from the capsular excision accompanying synovectomy.

Tenosynovectomy involves excision of involved tenosynovium about the flexor and extensor tendons. Trigger fingers result from flexor synovitis. Commonly seen, they cause the flexor digit to lock in flexion or extension. This must be looked for carefully in rheumatoid patients since their joint complaints may overshadow tendon entrapment. Flexor synovitis may also cause median nerve compression in the carpal tunnel. Since

joint stiffness may also overshadow sensory hypesthesia and parasthesia, usually the presenting complaint with this syndrome, a careful history should be taken. Surgical release of the volar carpal ligament is a highly effective measure for relief of both motor and sensory complaints. Prolonged extensor tenosynovitis may result in extensor tendon ruptures. Early tenosynovectomy will prevent the attritional changes that lead to these tendon ruptures. The duration of tenosynovial involvement rather than the mass of the tissues involved seems to have a better correlation with the occurrence of

tendon rupture. It is certainly better to perform tenosynovectomy early than to place one's confidence in obtaining a good result following extensor tendon repair after rupture.

Synovectomy and tenosynovectomy are prophylactic surgical considerations, while tendon surgery in the rheumatoid hand is of reparative nature. Tendon transfers may be effective where multiple tendons are ruptured and reanastomosis cannot be effectively accomplished. Extensor tendon realignment and intrinsic tendon release commonly accompany joint implant arthroplasty. This tendon work helps restore balance to the rheumatoid hand in the reconstruction process.

As a general principle, arthrodesis or fusion would seem to be contraindicated in a patient who has multiple joint involvement. With recent advances in arthroplasty techniques, however, arthrodesis now has a definite place in the overall treatment of the rheumatoid hand. In the destroyed small joints, especially the IP joints, arthrodesis can correct severe deformities and allow improved function by reducing the number of unstable segments in the upper extremity. This results in both increased power and increased motion.

In recent years arthroplasty techniques consisted of excision and soft tissue interposition. These methods universally lacked stability and usually resulted in weakness without promise of prevention or recurrence of deformity. Currently employed implant surgery finds major application in the hand at the metacarpophalan-

geal joint and the carpo-metacarpal joint of the thumb. Implant arthroplasty may also be effective at the elbow and the wrist. All techniques require re-section of the joint, with implantation of a joint spacer made of silicone or a metal-plastic facsimile of the normal joint. The spacer becomes encased in scar, which with controlled postoperative motion develops into a new capsule around the implant. This new capsule-implant complex provides controlled position and stability of the joint. Inserted in this fashion, shortening and collapse are interdicted, thus allowing return of effective muscle force transmission.

In 1948 Vaughn-Jackson described the "caput ulna" syndrome. This occurs when synovitis of the distal radial ulnar joint produces attenuation of the retaining ligaments, resulting in a dorsal dislocation of the distal ulna. Continued subchondral activity of the synovium results in erosive changes in the distal ulna. The extensor tendons are at great risk of rupture as they move across the roughened surface of this dislocated joint. This risk may be eliminated by the resection of the distal 2.5 cm. of the ulna, often done in conjunction with dorsal extensor tendon tenosynovectomy. Re-

lief of painful wrist rotation is another significant benefit of this procedure.

Activities of daily living require attention in the rheumatoid upper extremity. Rest is required for both limb and body. The patient should be advised that the deformity will increase if he uses his hands in power activities when power is not present. Opposition pinch rather than apposition pinch should be encouraged. Exercises other than those employed in the day to day hand activities are not needed. Many have shown that vigorous exercises tend to apply distal forces and burden the diseased tissues to such an extent that deformity is more rapidly increased.

Splints may be very useful as adjunctive measures. They cannot be used on patients who cannot be followed regularly in a clinic. Rigid devices are poorly tolerated, complex devices poorly understood and loose devices not efficient. Patients' splints should be adjusted frequently, as even properly fitted splints can cause sores and pressure areas. Splinting can be categorized as rest splints, corrective splints and assistive splints. Rest splints are helpful at night and early in the development of inflammation. Corrective splints are used to break the contracture-disuse-stiffness cycle and to change nonfunctional position to a more functional one. Few patients will tolerate these indefinitely, and it is hard to find a candidate who will greatly benefit from these over the long haul. Assistive splints attempt to supply a missing function by external means. These must be light, cos-

metic and well fitting for usage to continue.

Some practitioners continue to use steroids intra-articularly and within the tendon sheaths, either as an isolated treatment method or in combination with surgery. I believe with proper indications intra-articular and intra-sheath injections of steroids can be utilized to delay the usually inevitable procedures such as trigger finger release and to make staging less difficult. Injections should be tabulated and not used to excess, however, I believe that the post-operative use of intra-articular steroids may favorably influence the course of regaining maximum motion after an operation such as synovectomy.

In summary, the integration of medical and surgical management for the rheumatoid patient in the past has been a difficulty, initially because of the unavailability of management methods. As these methods became available, they were limited to the specialty within which they were developed. Now rheumatologists, occupational therapists, social workers, visiting nurses and orthopaedists are beginning to share their knowledge in their own specific areas as they apply to the arthritic. The integration of medical and surgical management must involve the willingness on the part of each specialty area to yield to other areas in their areas of expertise.

Another tremendous problem is the chronic course of the condition itself. In medical and surgical lingo, "cure" has satisfying finality to it. Whatever the condition to be cured, the course



of the required treatment is often short. Modification or amelioration of a chronic condition such as arthritis, however, is less satisfying, especially to the physician. For this reason we sometimes use less than the totality of our available resources to manage chronic problems. For instance, failure to consult the occupational therapist may deny the rheumatoid patient the benefits of simplifying his daily activities.

A supervised physical therapy program can forestall development of contractures which may become disabling. Orthotic expertise may improve functional positioning as well as pre-and-post-operative management. Failure to consult an orthopaedist early may

result in less successful surgical procedures as the deformity increases. Failure to maintain good medical management during surgical procedures often leads to an unsatisfied, uncomfortable and unhappy patient.

The assessment of benefits from surgical treatment in arthritis is fraught with problems. The major difficulty is assessing the treatment of a single functional disturbance from that of adjacent joints. For instance, wrist function to a great degree determines hand function. Selection of appropriate procedures and staging when multiple procedures are necessary is difficult. When multiple joints are severely involved, the local benefits to be gained by surgery must be considered in light of total disability. For instance, hand reconstruction might prove of little benefit to a patient who has ankylosed shoulders and elbows. Likewise a patient with severe upper and lower extremity involvement might first require upper extremity surgery in order to manage crutches or a walker, which may later be necessary to rehabilitate lower extremity reconstruction.

As an overview or approach to the disabled rheumatoid upper extremity, one should begin working with the proximal joints. At the elbow, procedures which may yield good results are synovectomy and radial head resection. These can often be done with isolated metacarpo-phalangeal joint implants or single joint fusions. The elbow prosthesis is coming into its own at this time and with the proper candidate can be successfully employed in both re-

levating pain and increasing function. If the wrist is painful or unstable, arthrodesis is necessary before hand work is begun. If not done first, metacarpal phalangeal joint or digital joint exercises and postoperative bracing will be compromised by pain. If the wrist is painless and stable but synovitis and a prominent ulna is present, excellent hand prophylaxis can be offered by combined tenosynovectomy and distal ulna resection. This should be followed or preceded by the combined operations of trigger finger release, flexor synovectomy and carpal tunnel release. If the thumb metacarpophalangeal joint is at all unstable it should be arthrodesed (fused) at this point. The metacarpophalangeal joint arthroplasties then can be done with the confidence of a good result. Digital joint work then may follow, with one exception — destroyed small joints requiring fusion should be done prior to MP joint arthroplasty, as the increased flexor power gained by digital stabilization markedly enhances the results of arthroplasty. In general, it is my opinion that all required bone stabilization should be done before arthroplasty or tendon repair. These prophylactic, reparative, and reconstructive alternatives have led to a more aggressive approach to the severe deformities resulting from rheumatoid arthritis.

Editor's Note: Dr. Bowers is Assistant Professor of Orthopaedic Surgery and Chief of the Hand Section. He frequently works with Dr. Norton Hadler, whose article on conservative management of arthritis appeared in the Spring issue.

by Christopher C. Fordham III, M. D.

126 MacNider

There are two particular issues with which I wish to deal in this column.

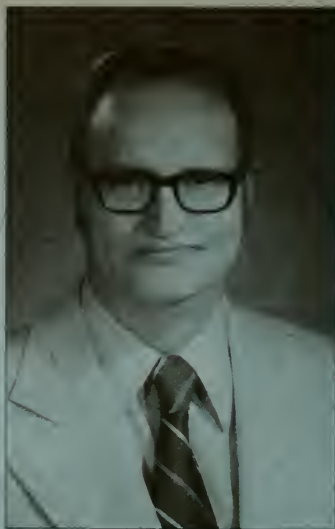
The first has to do with the School's commitment to, and relationship with, its alumni. We often say (and genuinely mean) that we want the advice, counsel, criticisms and moral support of our alumni, fully as much as financial support. Obviously, we need all of these. It should clearly be understood by our alumni that the development of the Area Health Education Centers across the state of North Carolina, three of which are in an affiliated arrangement with other universities, represents a specific, complex set of health education needs by a partnership between the individual regions and communities and a university. It is a creative, promising and terribly involved effort. It will be fraught with difficulties and misunderstandings along the way, but ultimately may result in improving the number, distribution and quality of health personnel available to serve the people of our state and region. Although the program has profound implications for continuing education, it does not, in and of itself, satisfy our commitment to relate to and serve our alumni as a very special group. Therefore, those of you who are located in AHECs where the primary affiliated medical school is associated with another university should make the most of that relationship. But we want you also to express to us (as we want from all of you) your advice and counsel, as well as your specific educational needs as they relate to this School.

Dr. Sapp and Dr. Tucker

have organized this year's Loyalty Fund Drive in a way which we hope and believe will encourage more participation. This is but one expression of our wish to have a closer, stronger and more productive relationship with our alumni now and over the years. Please express your views to us.

The second major issue is that of the future of your University — the University of North Carolina at Chapel Hill. Through the years, the people of North Carolina have supported this great University, and she has responded by achieving distinction in the national and international community of outstanding educational institutions. What this means, simply, is that the sons and daughters of the citizens of our state, whatever their station in life, have access to an excellent University with strong graduate programs, if they can effectively compete for the available places. The University is, indeed, the envy of many, if not most, states as a public resource of inestimable value to society. North Carolina, of course, has other important and distinguished public and private institutions of higher learning; and she has colleges and community colleges which serve an important role in higher education in the state. The concept of building broad-based educational opportunity by a network of regional colleges and universities with access to strong graduate programs at one or more leading institutions is one which many states are attempting to emulate.

There are many ways in which an institution can dilute the loyalty of its alumni: by weak per-



formance on the athletic field, by student or faculty activism, by refusing admission to the sons and daughters of alumni. These are difficult issues, and no institution survives without disappointing many. But this great University is clearly worthy of the strong support of its alumni and its constituents throughout the state and nation, and it will need that support in the coming months and years. I hope that the alumni of the School of Medicine will join in full measure with all alumni of the University of North Carolina at Chapel Hill in seeing that strong representations are made wherever possible to sustain and to continue to build this University as a unique and precious resource to the people of North Carolina and the nation.

Cancer Research Center— Our Latest Addition

The National Cancer Institute has awarded the School of Medicine \$1,230,018 to establish a specialized cancer research center.

Foundations for a variety of Cancer Center programs will be developed during the next three years under the direction of Joseph S. Pagano, Professor of Medicine and Bacteriology and Immunology.

At the outset the primary thrust of the Cancer Center will be directed toward basic laboratory research. Selected areas will be integrated into an interdisciplinary program aimed at developing new approaches to the detection, control and understanding of cancer.

In announcing the award, Dean Christopher C. Fordham III, and Dr. Pagano said that much significant cancer-related research and many clinical activities are presently underway on the Chapel Hill campus. The new Cancer Center will help provide an interdisciplinary focus for many of these activities.

The new award represents the culmination of efforts by a number of faculty members in various departments over a period of several years. In the early effort, James Newsome of the Department of Surgery and William Pearl-

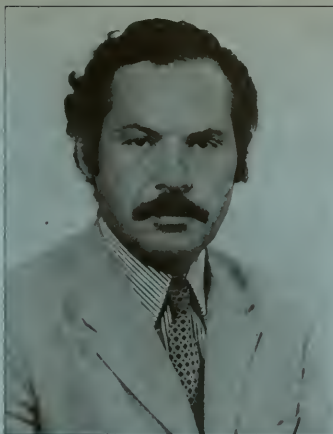
man of the Department of Pharmacology helped to organize an oncology (cancer) faculty effort. This led to the Cancer Center program organization, the appointment of Dr. Pagano as the Director, and the successful achievement of the award.

With a small group of core faculty as its nucleus, the Center will involve nearly every department in the medical school, as well as other schools in the Division of Health Sciences. Dr. Pagano sees the Center as a forum for identifying areas where cancer research is needed and for encouraging medical faculty to formulate proposals to improve the understanding and treatment of cancer.

Some of the important areas of investigation at Chapel Hill include the role of the body's immune system in fighting cancer, the hormonal control of tumor function and growth, and human malignancies that might be caused by viruses, especially members of the herpesvirus group.

The Center's development will progress in three stages. The initial grant will enable Dr. Pagano, his assistant Mrs. Antonietta D. Hyche and the Cancer Center staff to establish the cornerstone for the future growth of specific programs, all of which will stem from basic laboratory research activities.

With the knowledge gained from basic studies, the Center will move into applied research and clinical programs. Dr. Pagano said that the focus again will be interdisciplinary, with the constant goal of upgrading the level of care for cancer patients in North Carolina.



This third developmental phase will be conducted through the Area Health Education Centers in North Carolina so that North Carolinians will have improved access to the latest methods for managing cancer through local hospitals that are linked to the medical school at Chapel Hill.

While concentrating on research, the Center faculty also will work with departments at the School of Medicine to unify the cancer curriculum. They will examine courses currently being taught and will define areas that need improvement.

A member of the UNC-CH faculty since 1965, Dr. Pagano has been Director of the Division of Infectious Diseases and the Virology Laboratory at The North Carolina Memorial Hospital.

As the new Director of the Cancer Center Program, he brings to the program a varied research career in cancer virology and medical studies. He has conducted studies at the department of virus research of the Karolinska Insti-

tute in Stockholm, the Wistar Institute in Philadelphia and the Swiss Institute for Cancer Research in Lausanne.

He is the Chairman of the Immunization Committee of the Infectious Diseases Society of America, a member of the Advisory Committee for the Frederick Cancer Research Center of the National Cancer Institute and a consultant to the National Institute of Allergy and Infectious Diseases and the National Institute of Neurological and Communicative Disorders and Stroke, as well as the National Cancer Institute. He also serves on the editorial boards of the Journal of Virology, Cancer Research and Intervirology.

Dr. Fordham and Dr. Pagano indicated that the Cancer Center at the University will ultimately require a Cancer Center Building to accommodate the research and training activities and to enhance the now limited capability of medical scientists to understand, treat, and, hopefully in the future, prevent many forms of cancer. A campaign for funds to build the Cancer Center facility (which will cost approximately \$5 million) is to be organized by The Medical Foundation of North Carolina, Inc.

Who's where

'15

Samuel Newman has been selected for inclusion in the thirty-ninth edition of Who's Who in America.

20's & 30's

Jesse Caldwell, Jr., '39, is President-Elect of the North Carolina Medical Society. Joining him as officers are **Chalmers R. Carr**, '33, Speaker, and **Verne H. Blackwelder**, '27, Councilor from the Ninth District.

Max Novich, '39, has been reelected Chief of Staff of the United Hospitals Orthopaedic Center of the Hospital for Crippled Children and Adults in Newark, N.J. He is also Director of the Department of Sports Medicine at the hospital and Clinical Associate Professor of Orthopaedic Surgery at the College of Medicine and Dentistry of New Jersey. His wife Jean recently led the ticket in the South Orange-Maplewood Board of Education election.

40's

Inez Elrod, '40, Medical Director of the Piedmont Carolinas Red Cross Blood Center, is Co-Chairman of the Blood Utilization Committee. With her Co-Chairman **Robert Langdell**, Professor of Pathology at UNC, she will study the collection, distribution and utilization of blood in North Carolina.

The new President of the North Carolina Medical Society is **James E. Davis**, '42, of Durham.

He succeeds **Frank Reynolds**, '43. Serving as Councilors for the coming year are **Edward G. Bond**, '46, from the First District and **William T. Raby**, '40, from the Seventh District.

50's

Paul W. Boyles, '51, is now practicing in Cary. His office, Triangle Medical Diagnosis and Therapy, Inc., is at 315 South Academy Street. Zip code 27511.

Will London, '55, has been reelected President of the Medical Staff of Watts Hospital in Durham. He is also Chief of the Pediatric Service at the hospital.

A. M. Diggs, '50, is still in radiology practice in Waterbury and Watertown, Connecticut. His address is 700 Breakneck Hill Road, Middlebury, Connecticut.

John McCain, '50, was elected First-Vice President of the North Carolina Medical Society for the coming year. He is also President-Elect of the Medical Alumni Association.

60's

Carwile LeRoy, '60, has been appointed Professor of Medicine and Director of the Division of Rheumatology and Immunology at the Medical University of South Carolina. He will be responsible for developing a program integrating the investigation of rheumatic disease, the formation of a curriculum in rheumatology and immunology, and the care of patients with rheumatic diseases. He was formerly Associate Professor of Medicine at Columbia



University College of Physicians and Surgeons and Director of the Edward Daniels Faulkner Arthritis Clinic of the Presbyterian Hospital in New York.

William B. Riley, '67, is completing a residency in plastic and reconstructive surgery at the University of Miami. He lives at 295 Glenridge Drive, Key Biscayne, Florida 33149.

John Z. Little, '67, is prac-

ticing general surgery in Springfield, Ohio. He has a son, Zeb, who is six. John can be reached at 3116 Clarion Drive, zip code 45503.

Takey Crist, '65, delivered the keynote address, "Counseling and Family Planning: The Counselor and Counselee," at a seminar on family planning held in Chapel Hill in May. Also participating in the program were **William E.**

Easterling, '56, **Mary Susan Fulghum, '71**, and **David Grimes, '73**.

Duncan S. Owen, Jr., '60, has received the Gerard B. Lambert Award for developing a new technique for the microscopic diagnosis of disease. He is Associate Professor of Medicine at the Medical College of Virginia in Richmond.

Carl Whiteside, '69, is now a staff psychiatrist with the Guilford County Mental Health Center. He will provide psychiatric services for the Pre- and After-Care Unit, the Partial Hospitalization Services, the Adult Unit and the Children and Youth Unit of the Outpatient Clinic in Greensboro. He and Sandra Kay have three children — Cass, 8, Jennifer, 6, and Matthew, 4.

Jack B. Peacock, '64, is a new addition to our Department of Surgery. Since 1970 he has been Director of the Trauma Service at the William Beaumont Army Medical Center in Texas. He comes back to UNC as an Assistant Professor.

Morris E. Williams, '68, is now a cardiologist with Cardiovascular Associates in Jackson, Mississippi. He and Ann have two sons — Ned, 5, and Greg, 4 — and live at 5366 Red Fox Road in Jackson.

Larry Mumford, '67, has moved from Fort Worth, Texas, to New Bern. He is practicing with the Coastal Children's Clinic, 707 Professional Drive. Zip code 28560.

John L. Davis, '69, is practicing ophthalmology in Atlanta. He opened his office, at 3280 Howell Mill Road, N.W., last year. The father of two children — Lor-

raine and Walter — he lives at 901 Hawick Drive, N.W. The zip is 30327.

William J. Murray, '62, is now a medical consultant to the North Carolina Drug Utilization Review Program. He will conduct liaison activities with North Carolina physicians and medical societies, evaluate and develop PAID's drug utilization review programs and publish articles based on data provided by PAID Prescriptions. PAID Prescriptions is a private, non-profit corporation currently administering the North Carolina Medicaid prescription drug program.

Patrick Guiteras, '69, is in general practice in Chapel Hill. His office is in the Hayes Building at the Glen Lenox Shopping Center.

Thomas R. Griggs, '69, is also in Chapel Hill — as an Assistant Professor of Medicine and Pathology. He has been a medical officer with the U.S. Public Health Service for the past couple of years.

70's

As a graduating orthopaedic surgery resident, **Robert G. Blair**, '70, was honored in June by the Medical University of South Carolina, where he had served as Chief Resident and Teaching Fellow. He is now stationed at the U.S. Naval Hospital in Beaufort, South Carolina.

James F. Browder III, '70, is now Assistant Professor of Surgery here. For the past year he was Chief Resident in otolaryngology at NCMH.

After completing a fellowship in otolaryngology and clinical im-

munology at the University of Florida and serving as an instructor there for a year, **Robert H. Cohan**, '71, is an allergist in Pensacola, Florida. His office address is 5252 North Carmel Heights Drive, zip 32504. He is the proud father of two girls — Sara Kristine, 3, and Abigail Kathryn, 2.

George Colclough, '74, has set up a general practice in Hillsborough. His address: 109 East King Street. Zip code 27278.

Charles Davant, '72, has finished a three-year family practice residency at the Riverside Hospital in Newport News, Virginia. He is now practicing at the Blowing Rock Medical Clinic in Blowing Rock.

Joseph Pringle, '75 is now in Portsmouth, Virginia. His address is 301 Effingham Street, Apt. 26, zip 23704.

Borden Hooks, '70, has just begun a family practice in Mount Airy with **Joe Jackson**, '72. He was discharged from the Navy in June, a year after the birth of his daughter Elizabeth. His address is 731 North Main Street, Mount Airy 27030.

Gene and Susan Sherman, are now living at 1318 Elmwood, Deerfield, Illinois 60015. Gene, '70, is a staff physician at the Naval Regional Medical Center in Great Lakes. Susan, '73, has just begun a two-year fellowship in endocrinology at the Northwestern Medical Center.

Donald C. Nagel, '72, has returned to Chapel Hill as Assistant Professor of Family Medicine. For the past three years he has been a resident in family medicine at the Medical College of Virginia.



Dr. Scarborough Honored in Star

Residents of Star proclaimed May 10 "Dr. Scarborough Day" in appreciation of Charles F. Scarborough, Jr.'s 25 years of service to the community. The festivities, sponsored by the Halcyon Woman's Club and friends of Dr. Scarborough, culminated in a dinner honoring the member of the class of '44.

Citizens of the community contributed over \$10,000 in Dr. Scarborough's name for furnishings for an intensive care unit at Montgomery Memorial Hospital. The donation and a plaque signifying the contributions were presented at the dinner, attended by approximately 500 people.

After the presentation was a program entitled "Key Actors in 'Buck's' Life." Those actors included the first of the more than 2,000 babies he has delivered, his first patient, and Charles Phillips, '44, a classmate in medical school.

Dr. Scarborough's admiration for Star is as great as the community's is for him. Reflecting on his decision to open an office there in 1949, he said, "I have no regrets whatsoever. I would come back tomorrow.

"There is great satisfaction in practicing in a community this size," he added, "where you know everybody and people are appre-

ciative. Here you treat the patient as an individual and not as a condition."

The son of Mrs. Charles F. Scarborough and the late Mr. Scarborough, he is active in the Star United Methodist Church and the Oassis Shrine Temple. He also serves on the Montgomery County Morehead Selection Committee, which chooses candidates to compete for Morehead Scholarships.

Dr. Scarborough is married to the former Clara Aderholt. They have a daughter Betsy, who is a student at Appalachian State University.



From Rotifunk to Kisumu

by E. Ted Chandler, M.D., '55

"A traveler must have the back of an ass to bear all, a tongue like the tail of a dog to flatter all, the mouth of a hog to eat what is set before him, the ear of a merchant to hear all and say nothing."
— Thomas Nashe

In 1968 one of my pediatrician friends told me the Myers Park Methodist Church wanted to recruit a group of medical personnel for work in mission hospitals in four African countries. Having a somewhat adventurous spirit, I quickly volunteered and received an assignment to Sierra Leone in West Africa.

After weeks of preparation, a colleague and I flew from New York to Sierra Leone's Lundi Airport. There we boarded buses, which were carried on motorized barges across a large river to Freetown, the capital.

The barge trip gave us our first real feeling of Africa. Many travelers from other African countries were on the way to Freetown on business. Tropical scenes surrounded us as the chugging barge made its way. We passed many fishermen in dugout canoes and

saw people washing clothes along the riverbank.

In Freetown we were surprised to see many sidewalk vendors selling ballpoint pens and socks. We were accosted pleasantly and frequently by young girls with trays of peeled oranges on their heads. Selling at two for a nickel, the oranges were a welcome thirst quencher.



From Freetown we traveled to Rotifunk, a six-hour trip over a very dusty dirt road. There we stayed with a delightful medical missionary family who operated a 50-bed general hospital. And there I was introduced to a kind of work that provided a welcome change

and offered challenges to which I was willing to try to adapt, thereby getting along without many of the ancillary diagnostic and therapeutic services often taken for granted.

My first hint of these differences came at the house itself. We had lights from 6:00 p.m. until the generator was cut off at 11:00. A cistern on the roof provided our water, which was boiled and filtered only for drinking and brushing teeth. The food, simple and sufficient, was stored in a kerosene refrigerator.

The hospital routine began with ward rounds. Most of the patients were children with infectious diseases. In addition, tuberculosis and injuries were prevalent, as were complications of child delivery. Measles, a particularly virulent disease in children, resulted in frequent fatalities in ages five and younger.

Primarily because of the high mortality resulting from malnutrition and infectious diseases among the younger children, the clinic was divided by age into those five

and younger and those older. This allowed a standardization of procedures for these frequently observed diseases. We spent the greater part of each day seeing between 60 and 100 patients in the clinics.

Since we had some difficulty with the language, we obtained patients' case histories through an interpreter. Though English is the official language in Sierra Leone, most daily conversation was carried on in Krio, a form of pigeon English. The interpreter also knew the dialects of Mende and Temne, and most of the patients were able to understand one of these.

The hospital was typical of other mission hospitals throughout Africa in its dependence upon the government. If the government were stable enough to subsidize the mission hospitals, they themselves would become stable operations. If not, their folding was almost inevitable. Mission boards are now trying to establish mobile or permanent units with limited personnel and facilities. These smaller units would be easier to maintain and would provide services to meet the people's needs.

Not all health care is delivered directly from the hospital. Some days we traveled by boat to relatively inaccessible villages, where we held clinics. On the way we shot ducks and monkeys with an antique shotgun. These were later given to the villagers for eating. These visits gave us an opportunity to see village life, learn about governmental structures and hear about some of the taboos reflected in secret societies and circumcision rites.



Village society in Sierra Leone is chiefly animist. Poro societies, whose ceremonies are not viewed by non-members, conduct ritual introductions into manhood and womanhood. Great emphasis is also placed on circumcision rites. Since circumcision is usually performed with a sharp rock, we saw frequent cases of tetanus.

In one village we were shown a large tree, called the "chief's tree," which was the burial area for the chiefs. Shortly before a chief's death, his head was cut off in order to pass his knowledge on to the next chief. The head was then retained and preserved, to be buried with the next chief when he died.

After my visit to Sierra Leone, I decided to return to Africa and learned of an internist, Lorne Brown, who operated permanent medical clinics in the bush areas of Kenya. A missionary for many years, he has long held that medical services should be tailored to the local needs with an eye to acceptance by the people at a



price they can afford. He has formed five clinics in western Kenya near Kisumu, a low lying city of the shores of Lake Victoria. These are run by dressers, who have had formal training as nurses and additional training in diagnosis and treatment by the doctor. In 1973 these five clinics saw 84,000 patients. They are self-supporting without the personnel problems and sophisticated equipment breakdown of a large hospital.

In this particular setting life takes a somewhat more leisurely turn. Dr. Brown visits each clinic twice weekly, bringing supplies and examining patients with special problems. Occasionally, with the dresser's assistance and language interpretation, we would spend the entire day in one clinic seeing the patients who came. Surprisingly, one can rapidly acquire a facility for working this way. It is much less taxing mentally than the routine in a modern medical practice, for the few drugs and effective therapies render esoteric diagnoses useless.

I felt frustrated primarily when I saw patients whose lives could be helped considerably by an unavailable surgical procedure. Although we performed minor surgery and minimal obstetrics, we could neither perform more sophisticated techniques nor send them anywhere to receive such procedures. The only alternatives to the mission hospitals were the government hospitals, often poorly staffed by poorly trained people.

The available medications were limited and, at times, hard to obtain. Shipped in from the



United States and Europe under the Medical Assistance Program, medical supplies were governed by customs regulations. If the shipments crossed a corrupt customs official, he could make it hard for the doctors to get the medicine or he could sell it on the black market.

The basic approach to this situation has to be that of rendering the type of care acceptable to the people at a price they can afford and in a manner that will do the greatest number the most good. The main thrust is directed toward treating malaria, nutritional deficiencies and infections. There are also some tropical diseases and parasitism.

The clinic patients heard daily talks on basic health and practical skills. In addition to instructing them to boil water and construct latrines, some clinics teach care of animals and such handy skills as how to make bricks. But in spite of these efforts, it is difficult to change deeply ingrained habits handed down from family to family. The superstitions and traditional beliefs formed some of the strongest obstacles to delivering good health care.

Most of the people generally preferred an untrained country doctor. In some cases, he was a very wise medicine man who listened to the patients' complaints without examining them and shrewdly guessed the source of the trouble. If his suggested cures didn't work, there was often no charge. These medicine men were frequently at the heart of village affairs and were consulted on any number of problems. A girl study-

ing primates in Kenya told us of one village doctor who was called on to solve any crimes that occurred.

In 1970 Dr. Brown and I held clinics in the churches of Nyeri, a city about 200 miles from Kisumu that has no medical facilities. There were obvious drawbacks to this system, but at that time it was the best that could be offered to the area. Working from the time we arrived at the clinic church until darkness descended, we usually saw an average of 50 patients daily. The following year we again did this type of work in Kitale, a delightful town in northwest Kenya.

In January 1975, I participated in a two-week short term medical mission to Liberia, West Africa, with the Christian Medical Society. Liberia is slightly larger than Tennessee with a population of 1.5 million. One advantage of working there is the ease of communication. Most Liberians speak a type of pigeon English which, I found, soon becomes easily understood.

Our work in Liberia was spread among mission and government hospitals. I have certain reservations about working in government facilities. The medical personnel in local hospitals are firmly ensconced and have neither the desire for innovative ideas nor the inclination towards improvement even in simple matters. Thanks to a radio hookup with the Ministry of Health in Monrovia, the seriously ill patients in outlying mission and government hospitals can be flown to the John F. Kennedy Hospital in Monrovia. Dr. Cooper, chief of medical

services at the JFK Hospital, explained the hospital's role as a referral center for the country. The hospital is generally well equipped although it lacks the ability to perform some sophisticated lab tests.

My conversations with Professor T. Daramola, a charming, very able Nigerian native who serves as Dean of the School of Medicine, were the most interesting parts of the trip. Trained in public health, he has a sound view of the School's overall responsibility. He recognizes the need for a strong basic science curriculum and works hard to recruit good faculty and establish an adequate library. He believes some modern equipment is necessary but would rather have a sound faculty than a great deal of sophisticated equipment. His view of the School is international — about half of the students are from other African countries. And he has been largely successful in encouraging graduates to practice in their native countries.

It is apparent that my family and I enjoy our trips to Africa immensely. If all goes well, we hope to return to Kenya in early 1976.

Editor's Note: Dr. Chandler's jaunts to Africa briefly interrupt his lively practice of internal medicine in Catawba County. He was kind enough to send us a list of organizations which encourage medical work throughout the world. If any of you are interested in similar adventures, write us at the Alumni Office, and we will send you a copy. Or contact Dr. Chandler directly at Route 2, Box 112, Conover 28613.

Of Chalk, Classrooms, and clinics

Thomas B. Barnett, Professor of Medicine, is on Kenan leave to do research in respiratory physiology with Professor Erling Asmussen at the August Krogh Institute, University of Copenhagen, Denmark. He will return August 1, 1976.

Shihadeh N. Nayfeh, Professor of Biochemistry and Pediatrics, will be on Kenan leave for a year beginning October 1. He will teach at the Lebanese University and Agricultural Research Institute and will conduct research directly related to his work here.

The U.S. Patent Office in Washington has issued a patent for the Hulka Clip, a tiny plastic and stainless steel device designed to prevent pregnancy. It is named for its developer, **Jaroslav Hulka**, Associate Professor of Ob-Gyn.

"How to Help the Chronic Alcoholic," a scientific exhibit prepared by **John A. Ewing**, Professor of Psychiatry and Director of the Center for Alcohol Studies, won top honors at the annual meeting of the American Psychiatric Association in May. The same exhibit was also awarded highest honors at the American Industrial Health Conference in April.

Timothy K. Gray, Associate Professor of Medicine and Pharmacology, has been awarded a \$50,000 March of Dimes clinical research grant. He will measure

absorption of calcium and phosphates under various conditions in the intestines of patients with familial hypophosphatemic rickets. The goal is to devise a safer and more effective treatment than that now being employed.

A national conference on the Area Health Education Center (AHEC) Program was held April 25-27 in Asheville. The meeting focused on "The Decentralization and Regionalization of Health Professional Education and Training."

Glenn Wilson, Associate Dean for Community Medical Care, has been named a member of the Advisory Panel on National Health Insurance to the Subcommittee on Health of the House Committee on Ways and Means.

Joel B. Baseman and **Peter D. Utsinger** have been named Jefferson-Pilot Fellows in Academic Medicine for 1975-76. Each will receive \$1,500 per year for four years. Dr. Baseman, Assistant Professor of Bacteriology and Immunology, will study growth control in animal cells. His research will center on the role of specific hormones and other factors in blood plasma responsible for activating and coordinating cell growth. Dr. Utsinger, Assistant Professor of Rheumatology, will study the interaction between cells in cell-mediated immunity. He will examine lymphocytes from patients with systemic lupus erythematosus and will determine their ability to respond to a variety of stimuli.

Dean Christopher C. Fordham III has been appointed to the Executive Council of the Association of American Medical Colleges (AAMC) as a representa-

tive from the Council of Deans. He has also recently been elected Chairman of the AAMC Southern Regional Deans. It is the second time in three years he has been selected for this position.

John K. Spitznagel, Professor of Bacteriology and Immunology, has been elected Vice Chairman of the Immunology Division of the American Society for Microbiology.

Gordon DeFries, Assistant Professor of Family Medicine and Director of the Health Services Research Center, is co-principal investigator of a 30-month project in which a series of guidebooks will be prepared for doctorless communities that want to develop local health care programs. The project is being funded by a \$254,000 grant from the Robert Wood Johnson Foundation. Working with Dr. DeFries will be James Bernstein of the Department of Human Resources in Raleigh.

George Johnson, Jr., Roscoe Bennett Gray Cowper Professor of Surgery and Chief of Vascular and Traumatic Surgery, delivered the outgoing presidential address at the fifth annual meeting of the University Association for Emergency Medical Services, held in May.

The National Cancer Institute has awarded a \$103,925 grant to **Colin G. Thomas**, Chairman of the Department of Surgery, to study the biologic characteristics of thyroid cancer.

Several members of the Division of Physical Therapy participated in the National Conference of the American Physical Therapy Association, held in Anaheim,

California, in June. Professor **Margaret L. Moore** presided at the meeting, Associate Professor **Charlene M. Nelson** presided at the program for writers, and Associate Professor and Acting Director **Mabel M. Parker** participated in the pre-conference Symposium on Graduate Education Programs in Physical Therapy. **Carolyn B. Herzia** and **Marjory W. Johnson** also attended the meeting.

Neil Kirkman, Professor of Pediatrics, has been appointed to a three-year term as Chairman of the Genetics Study Section of the National Institutes of Health.

The 1975 Carolina Communications Seminar held May 24 in Raleigh included a special session on "Selecting Media for the Message," by **David L. Raney**, Instructor in Communications with the Medical Sciences Teaching Laboratories.

Arthur J. Prange, Jr., Professor of Psychiatry, spent the last two weeks of July in Europe attending meetings and visiting colleagues. He addressed the pharmacology section of Hoffmann-La Roche, Inc., in Basel, Switzerland, on the subject of behavioral effects of peptide hormones. He also attended the Sixth International Congress of Pharmacology in Helsinki and visited psychiatric research facilities in Copenhagen and London.

The Departments of Bacteriology and Immunology and Medicine have been awarded a joint training grant by the Department of Health, Education and Welfare, Public Health Service. Entitled "North Carolina Venereal Disease Program," its goal is to train indi-



viduals to enter research careers in the field of venereal disease. Trainees will work in the laboratories of **Philip Sparling**, Associate Professor of Medicine and Bacteriology; **G. P. Manire**, Professor and Chairman of Bacteriology and Immunology; **Priscilla Wyrick**, Assistant Professor of Bacteriology; **Harry Gooder**, Professor of Bacteriology; **Joseph S. Pagano**, Professor of Medicine and Bacteriology; and **Joel Baseman**, Assistant Professor of Bacteriology.

Gail Wertz, Assistant Professor of Bacteriology and Immunology, has been awarded a grant by the National Science Foundation to study replication of vesicular stomatitis virus. The research is aimed at finding ways to interfere with viral replication in order to develop potential antiviral agents.

Robert Mueller, Associate Professor of Anesthesiology, was a reporter for an international

symposium on Chemical Tools in Catecholamine Research held in Sweden in July. The meeting was sponsored by the Swedish Medical Research Council.

New Faculty

Philip A. Anderson, Assistant Professor of Family Medicine and Clinical Director of the Family Practice Residency Program, has just completed training at the Family Practice Center of the Akron City Hospital. He holds the B.S. and M.D. degrees from the University of Michigan.

Philip A. Bromberg, Professor of Medicine and Chief of the Division of Pulmonary Diseases, comes to Chapel Hill from the Ohio State University College of Medicine, where he held a similar position. A graduate of Queens College, he received his medical training at Harvard.

David J. Delany, Assistant Professor of Radiology, has been a Visiting Assistant Professor here

for the past three years. A native of Great Britain, he studied at Cambridge University and completed his medical training at St. Bartholomew's Hospital.

James R. Foster, Assistant Professor of Medicine, was Assistant Chief of Cardiology at the U. S. Public Health Service Hospital, Staten Island, New York. A graduate of Amherst College, he holds the M.D. degree from Cornell.

David Gordon Kaufman, Associate Professor of Pathology, is a graduate of Reed College and Washington University. Since 1970 he has been a researcher with the Lung Cancer Branch of the National Cancer Institute and a surgeon with the U.S. Public Health Service.

J. Stephen Kizer, Assistant Professor of Clinical Pharmacology and Medicine, comes to Chapel Hill from the National Institute of Mental Health, where he was a research associate. A graduate of Princeton University, he earned the M.D. degree from Duke.

Peter M. Levitin, Assistant Professor of Medicine, is a graduate of Franklin and Marshall College and the University of Pennsylvania School of Medicine. For the past two years he has been a Fellow in Rheumatology at the University of Virginia.

Lee M. Marcus, Assistant Professor of Psychiatry, has been Clinical Director of the Treatment and Education of Autism and Related Communications-Handicapped Children (TEACCH) Center and Clinical Assistant Professor here for the past year. A graduate of the University of Pennsylvania, he holds the Ph.D. degree from

the University of Minnesota.

Margaret A. Nelsen.

Assistant Professor of Surgery, has been a surgical resident and clinical cancer trainee here for the past seven years. Last year she was a Research Associate in surgery. She holds the A.A., B.A. and M.D. degrees from George Washington University.

Claude T. Nuzum, Associate Professor of Medicine, holds the A.B. and M.D. from Harvard and the B.A. and M.A. from Cambridge University. Since 1970 he has been at the University of Kentucky Medical School.

Roy C. Orlando, Assistant Professor of Medicine, served as a gastroenterologist in the U.S. Navy Reserve, Naval Hospital Memphis in Milligan, Tennessee, for the past two years. He is a graduate of Queens College and Georgetown University School of Medicine.

Luis Reuss, Assistant Professor of Medicine, was the L. G. Welt Fellow here last year. A citizen of Chile, he holds both the B.A. and M.D. from the University of Chile.

John F. Rogers, Assistant Professor of Medicine and Pharmacology, has been an Instructor in Medicine and a Clinical Fellow in medicine and clinical pharmacology at Johns Hopkins Hospital for the past two years. A graduate of Johns Hopkins, he received medical training at the University of Maryland.

Robert Sakata, Associate Professor of Medical Allied Health Professions and Director of the Vocational Rehabilitation Counseling Curriculum, has been Associate Professor and Director

of the Guidance Bureau at Kent State, where he earned the Ph.D. He is also a graduate of the University of California and California State University.

David D. Schmidt, Assistant Professor of Family Medicine and Clinical Director of the Model Family Practice Unit, has been a Clinical Instructor in Pediatrics at Harvard. He was also a preceptor of the Harvard Family Health Care Program and maintained a private practice in Amesbury, Massachusetts. He is a graduate of Dartmouth College and Harvard Medical School.

Robert W. Sealock, Assistant Professor of Physiology, has just completed a National Institutes of Health postdoctoral fellowship at the Ecole Normale Supérieure in Paris and at Harvard Medical School. A graduate of Iowa State, he holds the Ph.D. from Purdue.

John J. Soltys, Jr., Associate Professor of Psychiatry, comes to the University from West-Ros-Park Mental Health Center, where he was Director of Services to Children and Youth. A graduate of the University of Massachusetts he received the M.D. from Harvard.

Peter C. Ungaro, Associate Professor of Medicine, attended Oberlin College and the University of Miami School of Medicine. He has been Assistant Professor of Medicine at the University of Kentucky Medical Center and Chief of Hematology at the VA Hospital in Lexington.

Frank M. Volberg, Assistant Professor of Radiology, received both the B.A. and M.D. degrees from Duke. For the past two

ars he has been an Assistant Professor at Cornell University Medical College.

Stephen Wagner, Assistant Professor of Medicine, has just completed a fellowship in cardiology at Presbyterian Hospital, Pacific Medical Center, San Francisco. He is a graduate of the University of Pennsylvania and the University of Rochester School of Medicine.

David Hughes Walker, Assistant Professor of Pathology, comes to Chapel Hill from Emory University, where he was Clinical Assistant Professor of Pathology. He received the B.A. from Davidson and the M.D. from Vanderbilt.

Resignations

Fredric I. Fagelman, Assistant Professor of Surgery — enter private practice.

Alexander B. Filimonov, Assistant Professor of Radiology to accept a position with Rochester General Hospital.

John I. Fishburne, Jr., Associate Professor of Ob-Gyn and Assistant Professor of Anesthesiology — to accept a position at Bowman Gray.

William P. Glezen, Associate Professor of Pediatrics — to the Baylor College of Medicine.

Rita B. Johnson, Associate Professor of Family Medicine, and **Stuart R. Johnson**, Associate Professor of Psychiatry and Director of the Southern Deans' Consortium — to accept positions outside the state.

H. A. Matthews, Jr., Assistant Professor of Radiology — to enter private practice in Bristol, Tennessee.

Gottschalk Tapped by National Academy of Sciences

Carl W. Gottschalk, Kenan Professor of Medicine and Physiology, has been elected to the National Academy of Sciences. He was one of 84 scientists from all over the world chosen for membership this year.

Members of the Academy, who are elected in recognition of distinguished and continuing achievements in original research, act as official advisors to the federal government on scientific and technological matters.

A member of the School of Medicine faculty since 1952, Dr. Gottschalk was named a Career Investigator of the American Heart Association in 1961. He is a graduate of Roanoke College, which awarded him an honorary degree in 1966, and the University of Virginia School of Medicine.

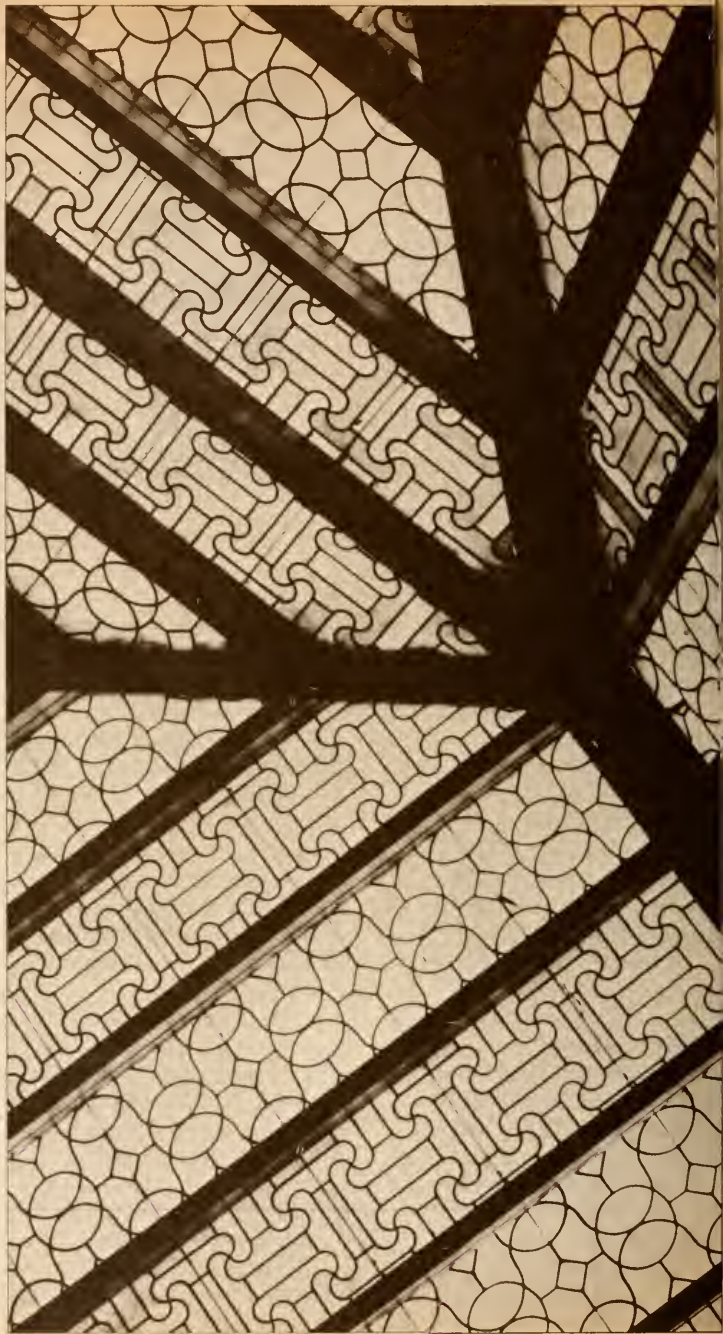
He belongs to numerous professional and honorary societies, including Alpha Omega



Alpha, the American Academy of Arts and Sciences, the American Association for the Advancement of Science, the American College of Physicians, Phi Beta Kappa and Sigma Xi.

Dr. Gottschalk is president-elect of the American Society of Nephrology. He serves on the Executive Committee of the Kidney Council of the American Heart Association and holds a diploma from the American Board of Internal Medicine. He has served on editorial boards of seven major journals.

He has received numerous awards, among them the Modern Medicine Distinguished Achievement Award, the Homer W. Smith Award from the New York Heart Association, and the Medical Basic Science Teaching Award. He has also held numerous distinguished lectureships across the country.



Honors and Awards

1974-75

The Professor Award
George M. Himadi, M.D.
Associate Professor of Radiology

The Medical Basic Science Teaching Award
Lloyd Robert Yonce, Ph.D.
Associate Professor of Physiology

The CCB Excellence in Teaching Award
William Paul Biggers, M.D. '63
Associate Professor of Surgery

The Henry C. Fordham Award
Richard Walsh, M.D.
Resident in Medicine

The Outstanding Intern Award
Harold Calloway Pollard III, M.D. '74
1st Year Resident in Obstetrics and Gynecology

The William deB. MacNider Award
Francis Sellers Collins '77

The Isaac Hall Manning Award
David Charles Lanier '75

The James Bell Bullitt Award
Cyril Anthony Allen '75

The Medical Faculty Award
Hoke Dickinson Pollock '75

The Roche Award
Kenneth Howe Winter '75

Sandoz Award
Donald Carl Fidler '75

The George C. Thrasher, Jr., Award
Eugene Drew Bridges '75

The Upjohn Award
Cyril Sheldon Dodge '75



The Heusner Pupil Award
Richard Nixon Duffy III '76

The Mosby Book Senior Awards
Pamela Stewart Rand '75
James Stephenson Wilson, Jr. '75

The Lange Senior Awards
Henry Worth Parker '75
Charles Pitman Langley III '75

Alpha Omega Alpha Honor Medical Society

Class of 1975
James Franklin Black
Cyril Sheldon Dodge
*Maynard Darvy Fuller, Jr.
*Thomas Higgins
Ernest J.F. Krug III
David Charles Lanier
Gary M.A. McClain
Danny Allen Myers
William Ronald Neal
Henry Niles Nelson III
*James Edward Peacock, Jr.
*Hoke Dickinson Pollock
Charles William Ralston III
Pamela Stewart Rand
*David Marshall Reid
Kenneth Keller Steinweg
*James Stephenson Wilson, Jr.
*Kenneth Howe Winter

Class of 1976
Robert Gary Berger
Jack Pool Byrd
Richard Nixon Duffy III
Catherine Joyce Everett
Kathleen Ann Gallagher
Charles Henry Hicks
John Harvey McMurray
William Douglas Routh
Grady Mitchell Stone
Carol Elizabeth Wratten

*Elected Junior Year

The Student Research Paper Awards

The Deborah C. Leary Memorial Award
Francis Sellers Collins '77
"A general method for detection of aminoaciduria"

Second Award
Duncan Sybren Postma '77
John Bartholomew Pecorac '78
"Outer hair cell loss and alterations in outer hair cell glycogen following treatment with tobramycin sulfate"

The Third Award
Deborah Daetwyler Boyd '77
"Effect of gastrointestinal hormones on electrolyte transport by rabbit esophagus"

The Student Research Day Awards*

The Michiko Kuno Research Award
Francis Sellers Collins '77
"Detection of aminoacidurias"

Student Research Day Second Award
Cornelius Fitzharold Cathcart '76
"High correlation of cell mediated immunity (CMI) specifically directed against brochogenic carcinoma cells found in heavy smokers"

Student Research Day Third Award
Duncan Sybren Postma '77
"Outer hair cell loss and alterations in outer hair cell glycogen"

Student Research Day Fourth Award
George Alan Stoudemire '77
"Synergism between prolactin and ovarian hormones on DNA synthesis in rat mammary gland: Possible relationship to tumorigenesis"

The Morehead Fellows, Class of '78
John D. Davis, Jr.
Mark Donald Monson
Peter Alan Schlesinger

Foreign Fellowship Awards
George William Henry '77
Marianna Matthews Henry '77
Gary Robert Krieger '77
Melinda Coover Paul '77
Richard Harry Weisler '77
John Jacob Brantley II '76
James Wesley Cockerill '76
Charles Henry Hicks '76
David Hershey Hopper '76
Vincent Edgar Paul '76

King Edward VII Hospital Fund-
Duke Endowment Foreign Fellowships
Warwick Aiken III '76
Jane Cary Burns '78
Robert Lee Hines '78
Peter Joseph Morris '78
Thomas Lee Pope, Jr. '78

Warwick Fellowships
Larry Duane Eggert '77
Leighton Alvin Raynor '77

The W.R. Berryhill Merit Scholarship
James Stephenson Wilson, Jr. '75

The Riggins Merit Scholarship
Richard Nixon Duffy III '76

Alumni Merit Scholarships
Hoke Dickinson Pollock '75
Thomas Higgins '75
John Harvey McMurray '76
Kathleen Ann Gallagher '76
Francis Sellers Collins '77
Michael Stevens Wheeler '77

* Copies of these research papers are available from the Alumni Office.



New

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1935



1975

March 25-26 are the Alumni Meeting Dates —
Classes of 1926, 1946, 1951, 1956, 1961 & 1966 will
have reunions. Be there!

Also on deck for this year —

- Oct. 1-Dec. 1 — Loyalty Fund Drive
- October 24 — Visiting Committee Meeting
- October 25 — Alumni Council Meeting
- October 22 — District VI Meeting — Wilmington
- November 11 — District XV Meeting — Salisbury
- December 10 — District XII Meeting — Greensboro
- May 9 — Graduation

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Bulletin: Vol. 21 Fall Issue 1975

1975. Fall.



Nutritional fads have caught the public's fancy in recent years. And some of them have crept into medical practice -- often as "miracle cures." In this issue Dr. Morris Lipton adds his perspective as a biochemist and psychiatrist to two of the most recent controversies: food additives and megavitamins.

The fall Visiting Committee and Alumni Council meetings were superb. The questions, ranging from humane medical practice to medical school admissions, were provocative. The full report will fill you in on what's happening in Chapel Hill and will -- we hope -- give you some ideas about how you and the School of Medicine can help each other deal with the pressing issues facing the profession today.

As we go to press, the first month of the Loyalty Fund Drive is drawing to a close. We've included a special "earlybird" report on contributions. If your class is lagging, give it a boost -- we're trying for 100 percent participation this year!

Finally, there's a profile of a long-time faculty member and division chief in the Department of Medicine. Most of you remember him well -- hope you enjoy this professional/personal glimpse.

One last reminder. We have a totally new format for this year's Alumni Day. You'll hear more about our plans later, but it's exciting! Be in Chapel Hill March 25 and 26 to join in the festivities!



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University of North Carolina School of Medicine

Bulletin: Vol. 21 Fall Issue 1975

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Nutritional Fads and the Search For Mental Health

by Morris A. Lipton, Ph.D., M.D.

The successes of medical research in achieving understanding, prevention, and cure of illnesses of univalent etiology — like the infectious and nutritional diseases — has left the physician with a large number of illnesses whose etiology is unknown and which he can neither prevent nor truly cure. These illnesses are treated with varying degrees of success. Throughout medical history, advocates of new treatments for incurable illnesses have frequently arisen. Often these treatments are offered by laymen without medical or scientific training. Occasionally they are advocated by physicians. Such novel treatments are often reported to prevent or cure; at the very least they claim more rapid and less expensive treatment. Commonly these treatments have no scientific base and are magical in nature. They appeal to a population of patients and their relatives who are desperately seeking solutions to medical or psychiatric

problems in which treatments are tedious, expensive, and relatively unsatisfactory. The claims are widely publicized in the lay press and attract many adherents who publicize them even further and thus attract even more adherents. Dr. Edward Rynearson, in a recent article entitled "Americans Love Hogwash," has summarized some of the types of treatment that are currently advocated and practiced. For example, a national survey in 1972 found that three million adult Americans wear copper or brass jewelry for arthritis or rheumatism, twenty percent of the population believe that arthritis and cancer are due to vitamin and mineral deficiencies, two-thirds of the population believe that a daily bowel movement is essential to health, and two and a half million adults take daily laxatives. About three-fourths of the population believes that extra vitamins provide more pep and energy.

In psychiatry — where the etiology of the major mental illnesses is neither simple nor clearly known, where full cures are rarely achieved, and where treatment of chronic illness is still far from satisfactory — fadism is especially prone to exist. The history of psychiatry reveals a repetitious search for what might be termed "instant mental health." The tendency to believe that one can quickly and simplistically snatch other humans from the throes of mental anguish stems from a variety of sources. These include the family and societal push to conquer the unknown — to solve the riddles that baffle mankind — and the personal wish, shared by most humans, that all people can somehow be made normal and happy. There is also a commonly shared fear that one might become insane oneself, and countering this fear is the idea that there must be a simple solution. Hope and faith are



essential in all types of psychiatric treatment: it has been shown in experimental studies with man and animals that without hope there is illness and death. Hope is a key ingredient to such groups as Alcoholics Anonymous and Recovery Incorporated.

The New Testament refers to the miraculous treatment of mental illness by Jesus. Exorcism of devils creating mental illness became popular in medieval times and has not yet fully disappeared. Mesmerism with hypnosis and galvanism with electrical treatments had advocates in the nineteenth century. Freud, early in his career, was an enthusiastic advocate of cocaine to eliminate tension, anxiety, and depression. Orgone therapy was advocated by Wilhelm Reich shortly after World War II. In this treatment patients suffering from debilitating physical and mental illness were placed in a box designed to concentrate units of cosmic energy that would then pass into the patient and thus generate biones or units of biological energy that would make the patient well. In the 1920s Henry Cotton considered focal infections of the teeth to be the source of insanity and offered data demonstrating that pulling teeth in order to eliminate toxins produced dramatic improvements in chronically institutionalized patients in state hospitals. Shortly after World War II more than 60,000 patients with chronic mental illness received lobotomies. In the 1950s L. Ron Hubbard invented Dianetics, a pseudoscientific psychological treatment that rapidly eliminated memories of childhood trauma and thus cured patients.

This movement still exists as an international church. More recently new types of psychological treatment, like primal screams and touch therapy, have become popular. There has even been a movement that denies the existence of mental illness and attributes all personal discomfort and deviant behavior to the difficulties of living in an evil society. Clearly, wishful thinking still permeates much of psychiatry.

None of us is so far from the capacity for wishful and magical thinking about the solution to serious problems that we can dismiss new and innovative solutions out of hand. If the proposed solution contradicts basic laws of physics and biology, dismissal may be easier. Thus proposals for perpetual motion to solve the energy crisis or proposals to improve the quality of our food supply by invoking Lamarckian inheritance of acquired characteristics are not taken at all seriously. But when proposals are made by physicians or scientists in areas where the basic information is not sufficient to immediately refute them and when these are supported by anecdotal evidence offered by experienced clinicians, they must be taken seriously even if they appear implausible.

Two such proposals involving diet have been made in recent years. The first is that food additives, especially synthetic coloring and flavoring agents, are responsible for hyperkinesis in children. The second is that supplementation of the diet with water-soluble vitamins and minerals in quantities 20 to 200 times the estimated normal daily require-

ment is beneficial in the treatment of schizophrenia and many other illnesses.

The concept that food additives result in hyperkinesis and learning disabilities was proposed about two years ago by Dr. Ben Feingold, a pediatric allergist from San Francisco who claims to have successfully treated more than 200 children by putting them on a diet that eliminates these substances. He has never published data to support his claim. Instead, his paper was originally presented at a meeting of the American Medical Association. In this he correlated the rise in hyperkinesis in the past decade with the rise in consumption of food and drink containing artificial flavors and then gave anecdotal reports of his successes in treating 200 children with an additive-free diet. He claims that 50 percent of children with diagnosed hyperkinesis who are receiving ritalin or amphetamine medication will become well on his diet. His presentation was reported by the press and by Senator Beall, who inserted it in the Congressional Record. Since then Dr. Feingold has published a popular book entitled "Why Your Child is Hyperkinetic." He has appeared before Senate Committees, HEW, and the FDA. In these appearances he presents children who have responded to his diet. Because of his experience he advocates removing all foods containing synthetic additives from federally supported school food programs, and he wishes to have a law passed making labelling of food products that are free from synthetic food additives



mandatory. By implication all foods not so labelled would be suspect.

Clearly, initiation of his recommendations would have major implications for the public and the food industry. If he is correct, he will have made a major medical discovery that would favorably affect the lives of at least a million children who are now receiving stimulant medication for hyperkinesis. If he is wrong, he will have generated considerable mischief in the food industry, the federal regulatory agencies, the medical profession, and — most important — the patients and their families.

The question then is, is Dr. Feingold correct? The correlational evidence is certainly not proof. One could as readily correlate the rise in hyperkinesis with school busing, economic uncertainty, or the rising divorce rate. The testimonials from patients and their families are also weak evidence because of the possibility of strong placebo effects. A critical examination of Dr. Feingold's reports reveals that he is unable to predict in advance which children will respond and that he is unable to offer any putative mechanism for the action of the food additives. Originally he felt that additives were haptenes that generated allergic responses resulting in hyperkinetic behavior. Finding no evidence to support this, he now feels that coloring agents, which are generally azo dyes, may be toxic to the central nervous system of a given portion of the population. He makes the point that while these agents

have been carefully screened by the Food and Drug Administration for possible carcinogenicity and organ toxicity they have never been screened for behavioral toxicity. In this he is quite correct.

Dr. Feingold is exceptional as an advocate of a new and innovative treatment because he is actively seeking independent replications of his work. He has gone to federal agencies requesting that they allocate funds for investigators throughout the nation to conduct carefully controlled double-blind studies that he feels will confirm his findings. Using his own population of responding children in double-blind controlled studies, he is even willing to participate in such research. Because of his eagerness to have his hypothesis and findings tested, it is likely that there will be attempts at replication within the next year. Thus it should be possible to make a definitive statement concerning the worth of his procedures in the near future. The conduct of this new research will occupy several university clinics and laboratories for almost a year and will cost approximately one million dollars. Although the Feingold Hypothesis does not seem plausible, there is insufficient basic science information to be certain. Only carefully conducted clinical trials can confirm or refute it.

In contrast to the food additive hypothesis of hyperkinesis, there is a group, calling itself "orthomolecular psychiatrists," that practices megavitamin therapy. There are reported to be about 250 physicians who

advocate daily doses of water-soluble vitamins that are twenty to several hundred times above the estimated daily normal requirements. They claim that this treatment gives benefit above that obtained in the usual practice of medicine in such conditions as the common cold, hypercholesterolemia, senility, and — in particular — schizophrenia. Dr. Linus Pauling, the very distinguished chemist and double Nobel Laureate, is the theoretician who coined the term "orthomolecular." He argues that much illness is a consequence of having a disordered molecular environment within the body and that restoration of the molecular environment, he believes, can be achieved by an optimal intake of nutrients for each separate individual. Furthermore, he believes that statistically derived normal daily requirements may be grossly inadequate for people with particular illnesses. Thus, while the National Research Council's estimates of daily nutritional requirements for vitamins and minerals may be statistically accurate for a whole population, for any single individual within that population they may be grossly inadequate.

Dr. Pauling is not a physician. The major practitioners of megavitamin therapy actually established their first theory, did their studies, and made their claims in 1953, fifteen years before Pauling offered a new theory. They were not taken seriously because the basic science foundation of their theory was found to be incorrect and clinical work failed. When Pauling in 1968

offered his new theory, which differed greatly from their own, they immediately accepted it. They have ridden to a new wave of popularity on his prestige. They have also modified their practice. Originally they used only nicotinic acid at doses of 3.0 to 12 grams/day as the megavitamin treatment for schizophrenia. Today they may use up to 30 grams of nicotinic acid and also add on massive doses of vitamins C, B₆, B₁₂, folic acid, and Thiamine. According to their judgement of the patient's clinical needs, they also use large doses of trace minerals and some hormones. They claim that the results of what is now called orthomolecular therapy are much superior to conventional forms of treatment. Some of their claims are irresponsible. For example, a leader of this school has advocated the use of a gram of nicotinic acid daily for all children from early infancy on to prevent schizophrenia. Orthomolecular psychiatrists have their own society, publish their own journal, and write books for the lay public. A few books have also been written by known literary figures who have received the treatment. They castigate conventional psychiatry and claim to have been saved by orthomolecular treatments.

The crucial questions: what is orthomolecular psychiatry and how well does it really work? The answer to the first question is clear. Strictly speaking, orthomolecular psychiatry is a misnomer because it does not substitute vitamins for the drugs used in conventional psychiatry. Rather



it uses the same drugs at the same doses and adds on massive doses of the vitamins. It also uses electro-convulsive therapy for schizophrenia more than conventional psychiatry does. As new psychotropic drugs are discovered, these are incorporated into the treatment, but vitamins and minerals are always added on, and favorable results are invariably attributed to the vitamin additions rather than to the drugs.

How good are the results? In the past 15 years megavitamin therapists have refused to conduct controlled clinical studies and have asserted that since they know their treatment works it would be unethical for them to withhold treatment from their patients. They suggest that skeptics should do the controlled studies. In the past five years several double-blind controlled studies using nicotinic acid and nicotinic acid plus pyridoxine with and without psychotropic drugs have been conducted in Canada, Ireland, and the United States. These have failed to show any advantage for the vitamins. The megavitamin practitioners argue that the attempted replications were inadequate because only one or two vitamins were used and that they now use many vitamins. The critics answer that megavitamin practice for fifteen years was based on the use of nicotinic acid alone and if claims of the efficacy of this vitamin are found to be untrue there is little need to work with multiple vitamins. Furthermore, strict replication is impossible because there is no standard method for using the multiple vitamins. Patients are given the combinations

according to their clinician's judgment with no laboratory data to support the choice of treatment. Thus it is likely that no two patients receive precisely the same vitamins in the same doses.

An American Psychiatric Association Task Force, which this author chaired, was established in 1973 to evaluate the theory and practice of megavitamin therapy in schizophrenia. It concluded that the basic science on which the theory was based was inconsistent and contrary to established biochemistry. It could find no evidence that schizophrenics suffered from vitamin or mineral deficiencies. Controlled clinical trials showed that this practice had no merit. Furthermore it can be expensive, and although toxicity is small, it is still present. This leaves the physician with a dilemma. What should he believe when practitioners who do not do controlled studies claim highly favorable results on thousands of patients and controlled studies on several hundred patients yield negative results? His problem is compounded when patients or their families demand such treatment.

It is quite clear that if we are to practice scientific medicine there is no room for this type of theory and practice. But not all of our medicine is scientific, and the generation of hope in patients and their families is a valuable asset. The old admonition that we must not take anything away from a patient unless we have something better to offer him must be respected. This author occasionally

encounters this dilemma and has never fully resolved it. It is clear that vigorous research must go on to obtain understanding and scientific treatment based on such understanding. Until that day arrives, the physician must be tolerant of individual patients' efforts at self-help, especially if they do not preclude the best conventional treatments we have and if they do no harm. On the other hand, fads that are frequently advocated on a national scale, and from which substantial profits can be made by the practitioner, should be vigorously refuted with a demand for hard evidence.

BIBLIOGRAPHY

1. Rynearson, EH: Americans love hogwash. *Nutrition Reviews* (A special supplement.) July 1974. pp. 1-14.
2. The National Advisory Committee on Hyperkinesia and Food Additives: Report to the Nutrition Foundation. June 1975. (Can be obtained from The Nutrition Foundation, Inc./Office of Education and Public Affairs/888 Seventeenth Street, N.W./Washington, D.C. 20006).
3. American psychiatric Association, Task Force Report No. 7: Megavitamin and Orthomolecular Therapy in Psychiatry. July 1973 (Can be obtained from: The American Psychiatric Association/1700 Eighteenth Street N.W./Washington, D.C. 20009).

Editor's Note: Dr. Lipton, Professor of Psychiatry and Director of the Biological Sciences Research Center, has served on numerous committees for the National Institutes of Health and the American Psychiatric Association. He discussed these topics on CBS's "Magazine" in early December. Much of his career has been devoted to the investigation of psychopharmacologic agents.

Of Chalk, Classrooms, and clinics

Edward R. Perl, Professor and Chairman of Physiology, presented two papers at the First World Congress of the International Association for the Study of Pain. The meeting was held September 5-8 in Florence, Italy.

Norman A. Coulter, Professor of Biomedical Engineering and Mathematics, has been elected a Regent of the International Academy of Proctology.

Thomas W. Farmer has been named Sarah Graham Kenan Professor of Medicine. He has been Chief of the Division of Neurology since 1952.

Floyd Denny spent part of October in Ireland as a visiting professor at the Royal College of Physicians and Surgeons. While there he delivered a lecture on mycoplasma pneumoniae. Dr. Denny is Chairman of Pediatrics.

Maria Perez-Reyes and **Elaine Hilberman** of the Department of Psychiatry participated in the annual meeting of the North Carolina Neuropsychiatric Association in October. Dr. Perez-Reyes chaired the session on "Changing Images of Women," during which Dr. Hilberman spoke on "A Support System for Women Medical Students."

Barbara S. Hulka, Assistant Professor of Family Medicine, has received the third annual Award for Excellence presented



by the Statistics and Epidemiology Section of the North Carolina Public Health Association.

Techniques for monitoring fetal heart rate and uterine activity during labor were subjects of a seminar held in Chapel Hill in September. **Luther M.**

Talbert of Ob-Gyn was program chairman. Other faculty participating were **Charles H.**

Hendricks, Edward H. Bishop, William E. Brenner, William E. Easterling, Jr., and Jack P. Mercer -- all from Ob-Gyn -- and **H. Neil Kirkman** from Pediatrics.

Philip T. Johnson of the Division of Laboratory Animal Medicine taught a four-month course designed to prepare animal technicians for nationally recognized certification by the American Association of Laboratory

Animal Science. Twenty-three students became certified. Johnson is chairman of the Regional Examining Board and Research Triangle Branch Educational Committee of the association.

Priscilla B. Wyrick.

Assistant Professor of Bacteriology and Immunology, has been awarded a grant by the National Council to Combat Blindness. She will examine the intracellular fate of Chlamydia in the macrophage and look for the release of components that in turn produce experimental disease.

Arthur J. Prange, Jr.,

Professor of Psychiatry, has been elected chairman of the Clinical Projects Research Review Committee of the National Institute of Mental Health. The committee reviews each year grant applications dealing with various aspects of clinical research in mental health and related fields.

Colin G. Thomas, Jr. Professor and Chairman of Surgery, was a visiting professor at the University of Virginia in July. He presented two lectures: "Hyperparathyroidism -- To Treat, Contend or Not to Treat" and "The Management of Neonatal Intestinal Obstruction."

Dean Christopher C.

Fordham III is a member of the Evaluation Committee of the National Fund for Medical Education. This committee reviews grant applications for innovative programs in medical education.

John E. Newbold, Assistant Professor of Bacteriology and Immunology, has been awarded a grant by the American Cancer Society to study in molecular detail DNA sequences present in

mammalian cells.

Donal Dunphy and Eric Jelly participated in a meeting of the North Carolina Academy of Preventive Medicine in October. Dr. Dunphy, Acting Chairman of Family Medicine, spoke on the AHEC Program. Dr. Jelly, Visiting Assistant Professor of Family Medicine, spoke on care of the aging.

Frank Wilson, Chief of Orthopaedic Surgery, has been elected President of the North Carolina Orthopaedic Association.

"Theoretical and Clinical Considerations in the Use of a New in vivo Oxygen Electrode" is the title of a paper presented by **Kenneth Sugioka** at the Royal College of Surgeons in England. The paper appears as a chapter in the book *Oxygen Measurements in Biology and Medicine*. Dr. Sugioka is Chairman of Anesthesiology.

John K. Spitznagel, Professor of Bacteriology and Immunology, spent October 10 at Lilly Research Laboratories. He presented a paper on "Antimicrobial Functions of Polymorphonuclear Leukocytes" and consulted with scientists regarding various research problems.

Enid R. Kafer, Associate Professor of Anesthesiology, is now serving on the Research Review Subcommittee of the Medical and Program Committee of the North Carolina Heart Association.

C. N. Stover, Associate Dean for Administration, has been chosen President-elect for the southern region of the Association of American Medical Colleges' Group on Business Affairs.

Judson J. Van Wyk is now

a Kenan Professor of Pediatrics. He is Chief of Pediatric Endocrinology.

New Faculty

Gene Harrison Albrecht, Instructor in Anatomy, received the bachelor's degree from Rollins College and the Ph.D. at the University of Chicago. This is his first academic post.

Jeffrey C. Allen is an Instructor in Pediatrics, a Clinical Scientist in the Child Development Institute, and a Resident in Medicine. He received the M.D. degree from Harvard. He is a former staff associate with the National Institute of Neurological Diseases and Stroke.

Steven L. Bachenheimer, Assistant Professor of Bacteriology and Immunology, received the B.S. degree from the University of Illinois and the Ph.D. from the University of Chicago. From 1972 until 1974, he was a Damon Runyon Memorial Fund Postdoctoral Fellow.

Bruce R. Brodie, Instructor in Medicine, attended Purdue University and the Washington University School of Medicine. He has been a fellow in cardiology at UNC-CH for the past two years.

Joseph J. Capowski, Lecturer in Physiology, has completed all of the course work for the Ph.D. in computer science from UNC-CH. Working with the department since 1972, he has designed computer graphics facilities for both the department and the neurobiology program.

Ivor Caro, Instructor in Dermatology, graduated from the Medical School of the University of Witwatersrand, South Africa.



Last year he was a registrar in dermatology at St. Johns' Hospital for Diseases of the Skin in London.

Margaret B. Dillard has been appointed Assistant Professor of Radiology. She received the A.B. degree from Mount Holyoke College and the Ph.D. in physics from UNC-CH. Since 1973 she has been a computer programmer for the Radiotherapy Division at NCMH.

Jagmohan D. Gupta, Assistant Professor of Medicine, is based at the Eastern North Carolina Hospital in Wilson. A graduate of the Government Medical College of India and Delhi University, he spent the past

year as a research fellow in cardiology at UNC-CH. He has also been associated with the New Hanover Memorial Hospital, Dorothea Dix Hospital, and Mount Sinai Medical Center.

Abraham Leon Kierzenbaum, Assistant Professor of Anatomy, has been a post-doctoral fellow and graduate student at the School of Medicine since 1971. He holds the M.D. degree from the University of Buenos Aires and has completed requirements for the Ph.D. in Anatomy from UNC-CH.

J. Robert Koewing, Associate Director of the AHEC Program and Assistant Professor of Medical Allied Health Pro-

fessions, has been with the Office of Medical Studies at the School of Medicine for the past year. He holds degrees from Trinity University in San Antonio and McCormick Theological Seminary in Chicago.

Barry Lentz, Assistant Professor of Biochemistry and Nutrition, has just completed two years as an NIH postdoctoral fellow at the University of Virginia. he received the Ph.D. degree from Cornell University in 1973.

Michael R. McGinnis, Assistant Professor of Bacteriology and Immunology, will direct the mycology and mycobacteriology sections of the NCMH clinical microbiology laboratories.

A graduate of Iowa State University, he comes to the School of Medicine from the South Carolina Department of Health and Environmental Control.

D. Kenneth Mitchell is Assistant Professor of Rehabilitation Counseling in the Department of Medical Allied Health Professions. He is a graduate of Ohio State University, Bowling Green State University, and Pennsylvania State University. During the past year he was rehabilitation counselor for the Altoona Hospital, Altoona, Pennsylvania, and the Charlotte Rehabilitation Hospital in Charlotte.

Ruth U. Mitchell, Professor and Director of the Division of Physical Therapy, has been at the Indiana University School of Medicine since 1969. She received the B.S. degree from St. Louis University and the M.A. and Ph.D. degrees from Case-Western Reserve.

Russell L. Pimmel, Associate Professor of Medicine and Surgery, has been Assistant Professor of Electrical Engineering at Ohio State University for the past five years. He holds degrees from St. Louis University and Iowa State University.

Dwight Alden Powell, Assistant Professor of Pediatrics, has been a fellow in pediatric infectious diseases here since 1972. A graduate of the University of Illinois College of Medicine, he received advanced training at Cleveland Metropolitan General Hospital and at Case-Western Reserve University Hospitals.

James C. Reed, Associate Professor of Radiology and Direct-



or of the Radiology-Pathology Teaching Laboratory, holds the B.S. degree from Florida Southern College and the M.D. degree from the University of Miami School of Medicine. For the past three years he served as an associate radiologist at the Armed Forces Institute of Pathology.

Bernard E. Statland.

Associate Professor of Pathology and Associate Director of the Clinical Chemistry Laboratory, holds the M.D. and Ph.D. degrees from the University of Minnesota. He has received additional training at the U.S. Public Health Service Hospital in New Orleans, the NIH Department of Clinical Pathology and the State University Hospital in Copenhagen, Denmark.

Joanne Stephan. Associate Professor and Program Director of Medical Technology, will also serve as Director of Education for Medical Technology in the Department of Hospital Laboratories at NCMH. She comes to Chapel Hill from the Medical College of Virginia. A graduate of Saint Mary-of-the-Woods College, she received the M.S. degree from the University of Louisville and the Sc.D. degree from Johns Hopkins.

Peter S. Stevens. Assistant Professor of Surgery, is a graduate of Emory University. During the past year he served as registrar in pediatric surgery at Queen Mary's Hospital for Children in Surrey, England, and as Instructor in Urologic Surgery at Duke.

James Donald Thullen. Assistant Professor of Pediatrics, is based at Wake Memorial Hospital. A graduate of the College

of Osteopathic Medicine and Surgery at Des Moines, Iowa, he spent the past year as a neonatal fellow at Duke.

David B. Washburn. Instructor in Radiology, is a diagnostic radiological physicist. He received both the B.S. and Ph.D. degrees from North Carolina State.

Barry R. Zeeberg. Instructor in Biochemistry and Nutrition, was a postdoctoral fellow at the University of Pennsylvania before joining the faculty here. He holds the Ph.D. from UNC-CH.

Resignations

Florence Bearden. Assistant Professor of Family Medicine -- to the University of Virginia.

Joyce A. Benjamins. Assistant Professor of Biochemistry and Nutrition to accept a position at Wayne State University.

Willard K. Bentz. Associate Professor of Psychiatry -- to accept a position at Marshall University, Huntington, West Virginia.

Hanson Y. Chuang. Assistant Professor of Pathology -- to accept a position at Brown University.

Andrew T. Cole. Assistant Professor of Surgery -- to accept a position in New York.

William Grossman. Associate Professor of Medicine -- to accept a position at Harvard Medical School.

Thampu Kumarasamy. Assistant Professor of Ob-Gyn -- to accept a position at the University of Virginia Medical Center.

Gerald K. Limber. Assistant Professor of Pathology,

to enter private practice in St. Louis, Missouri.

James A. Merchant. Assistant Professor of Medicine -- to accept a position with the U. S. Public Health Service.

Ronald C. Reitz. Assistant Professor of Biochemistry and Nutrition -- to accept a position at the University of Nevada.

Betty J. Sanders. Assistant Professor of Medical Allied Health Professions -- to move to Wichita State University in Kansas.

Charles N. Swisher. Assistant Professor of Pediatrics and Medicine -- to move to the University of Chicago.

New Physicians Referral Directory Available

The North Carolina Memorial Hospital has published a new Physicians Referral Directory. Containing the names of physicians in each specialty at NCMH, the directory also introduces practitioners across the state to the new WATS line number for referrals -- 800-672-8271. If you have not received your copy of the directory, contact William E. Easterling, Jr., Chief of Staff.

It was a Very Good Fall

(Meeting That Is)

The fall meetings of the Visiting Committee and Alumni Council were among the best ever! The discussions were lively, the topics provocative, and the enthusiasm evident. There was only one ingredient missing — Dean Fordham, who, unfortunately, could not get back from a meeting in the frozen northwest. He sent his greetings and apologies via Dr. Sapp.

Among the more serious subjects — curriculum changes, student aid, proposed federal legislation, and admissions — were some lighter notes. Dr. Sapp reported that the Loyalty Fund Drive, restructured this year under the class chairman/class agent system, had done fairly well during its first three weeks. Contributions since October 1 totaled approximately \$6,000. A list of earlybird contributors appears elsewhere in this issue.

Dr. Sapp and Alumni President Reggie Tucker, '55, also mentioned some upcoming events. Alumni Day has been expanded to two days — March 25 and 26. The

first day will feature a program by the alumni, with class reunions that night. On the second day, faculty will be in charge of the program to be followed by the annual banquet and presentation of Distinguished Service Awards. A committee will be formed soon to plan these programs. If you have any suggestions, let the Alumni Office know.

Alumni President-elect John McCain, '50, has been active in getting an alumni membership survey started. This survey, to be taken within the next year, will enable the Alumni Office and the Association officers to create programs that will be of greater service to you, the alumni.

Noting that the students are greatly interested in the curriculum and are always ready to voice their opinions, Associate Dean William D. Huffines, '55, described some of the changes that have taken place in recent years.

The fourth year, which is now entirely elective, features a required four-week rotation in

family medicine. This rotation, discussed by Whitehead Society President Adrian Long, '76, and Senior Class President Robert Shapiro, '76, enables students to work with practitioners outside Chapel Hill. Generally popular with the students, this is one of the seven elective periods they must take in the fourth year and one of two primary care electives they must have to graduate. Practitioners who conduct the family medicine selective are chosen by the Department of Family Medicine. Any of you interested in having students in your offices may contact the department directly.

Students in the third year also receive a portion of their training off campus. Class President Bill Fulkerson, '77, noted that students can spend four weeks of the medicine rotation in community hospitals. The third-year class can also take obstetrics and pediatrics rotations outside of Chapel Hill. Some students receive as much as 30 per-

cent of their third year off campus. This enables them to see a broader range of cases than are usually seen at NCMH.

The first- and second-year curricula have been integrated into a modified organ systems approach. Under this system, the students study the basic sciences in terms of anatomical systems. Gross anatomy and histology, however, remain discrete courses.

The examination system has also changed. Exams for each course are now given according to the number of contact hours. This was done in an effort to regulate the number of exams given. Dr. Huffines and Steve McKinnon, '79, also discussed a newly initiated numbering system. Under this system each student receives a number to be used instead of his or her name on exams. Course instructors cannot match a particular student's name with his number unless the student is not doing well. Both Dr. Huffines and Steve agreed that this system so far seems to decrease the competitive atmosphere among students.

Another innovation this year is the division of the 140 members of the first-year class into seven-person lab groups. Done to combat the loss of class unity among the larger classes, this division enables the groups to work together in the labs, have case conferences, and meet with their preceptors. A representative from each group forms the governing body for the class.

Increasing enrollment, mandated by the Legislature, has limited the educational facilities available to students in Chapel Hill. Since the total enrollment



will reach 640 by 1980, student rotations throughout the state will become more necessary. To enable the students to receive the best education possible, the School and alumni, as well as other physicians in North Carolina, will have to work more and more closely. Under consideration now is a two-week off-campus rotation in physical diagnosis at the end of the second year.

Mike Parker, President of the Class of '78, voiced concern that he and other students share over the dwindling supply of scholarship and loan money. Both the military and Public Health Service programs have been drastically cut, as has the state's educational loan program. The latter program, which provides \$4,000 per year

in return for as many years of practice in a North Carolina community of less than 10,000, has in the past been largely noncompetitive. However, this year only eight members of the second-year class received these loans.

Federal legislation affecting medical education is also a chief concern among the faculty. Dr. Huffines briefly discussed pending legislation affecting capitation money – the money, based on enrollment, the federal government awards the School to help meet operating expenses. The legislation, if passed, would require that 25 percent of each entering class be committed to accept Public Health Service grants. The School could then either abide by this regulation or refuse the

money. If the latter course be chosen, the responsibility for this funding will be thrown back on the state and local communities.

William J. Cromartie, Associate Dean for Clinical Sciences, mentioned another piece of pending legislation that would govern the numbers of physicians in each specialty an institution could train. Senator Edward M. Kennedy favors legislation requiring each institution to train over half of their residents in primary care. Should an institution not comply, federal funding would be withheld. The Committee on Graduate Medical Education is currently wrestling with the question "What criteria do you use to decide the number of physicians of various specialties per community?"

To help the faculty deal with such sociological problems of health care delivery, a new department — The Department of Community Medicine and Hospital Administration — is being created. A search committee for a chairman of this department, which has been a division of the Department of Family Medicine, has been appointed. Members of the department will include epidemiologists and social scientists with expertise in the medical field.

The Department of Family Medicine has been strengthened, and a new chairman has been nominated by Dean Fordham for approval by the Board of Governors. Dr. Cromartie noted that Donal Dunphy, Acting Chairman, and David Schmidt, Director of the Family Practice Unit, have provided excellent leadership. The Department would like to have six

to eight family physicians working in the medical center.

The study of medical ethics and professional responsibility is receiving significant attention. A Committee on Human Values in Medicine is considering the following questions: What is the best setting in which to teach humane medical practice? Do we need special programs? Can students be taught this in community rotations? Should the School have a special faculty for medical ethics?

William E. Bakewell, Chairman of the Admissions Committee, explained the process the committee undertakes in selecting candidates. In recent years the number of applicants for available places has increased greatly. Under law, 85 percent of each class must be North Carolina residents. However, the School likes to keep comfortably above this percentage; in the current first-year class only 7.5 percent of the students are from out of state. Dr. Bakewell estimated that, nevertheless, the Committee must turn down approximately four North Carolina residents for every one admitted.

He stressed that the Committee does not set out with a certain stereotype in mind. In addition to grades and AMCAT scores, the Committee considers letters of recommendation, an applicant's personal letter of interest, interviews, nonacademic activities, and an applicant's potential for bringing a special dimension to the practice of medicine. He said that a fair number of problems exist because of misunderstanding and invited suggestions from the alumni.

As many of the alumni know, the Medical Foundation of North Carolina, Inc., is a supporting arm for the Medical Center. Over the years alumni and friends of the school have raised several million dollars through the Medical Foundation for the support of scholarships, faculty, research, program development, facilities, and many other needs that cannot be met from other sources. One cannot overestimate the value of the special and regular gifts to the school through the Medical Foundation, the Co-Founder's Club, the Loyalty Fund Drive, and its other components. Indeed, the citizens of our State and Nation are better served by this Medical Center because of the work of this Foundation and its components.

The Board of Directors of the Medical Foundation has recently established a Development Committee dedicated to assisting the School in achieving the basis for adding two urgently needed facilities: a Cancer Center facility and a Community Health Sciences facility. The program elements that will be housed in these two buildings have been reviewed in detail with the Board of Directors of the Medical Foundation and with the Development Committee. There is general agreement that they represent urgent needs and that a private drive for funding is necessary. Total anticipated costs of the two projects is in the range of \$9,000,000. The Development Committee consists of distinguished citizens across our State who will be assisting in this project, and I should like to call to the attention of all of our

alumni the composition of the committee:

Mr. William F. Algary, Asheville; Mrs. Nathan M. Ayers, Greensboro; Mr. Irwin Belk, Charlotte; Mr. H.W. Bernard, High Point; Mr. Joseph M. Bryan, Jr., Southern Pines; Mr. John A. Cunningham, Charlotte; Mr. J. Mac Duff, Elizabeth City; Mr. Henry A. Foscue, High Point; Mr. William T. Harris, Charlotte; Mr. George Watts Hill, Sr., Durham; Mr. Howard Holderness, Greensboro; Mr. Walter S. Lineburger, Belmont; Dr. John F. Lynch, High Point; Mr. Hector MacLean, Lumberton; Mr. John T. Manning, Chapel Hill; Mr. James H. Millis, High Point; Mr. J. Leonard Rawls, Jr., Rocky Mount; Mr. Oliver R. Rowe, Charlotte; Mr. Claude Smith, Rockingham; Dr. Foyell P. Smith, Lexington; Mr. Zachary Smith, Winston-Salem; Mr. John W. Stackhouse, Goldsboro; Mr. Louis C. Stephens, Jr., Greensboro; Mr. N.A. Townsend, Jr., Raleigh; Mr. Richard A. Urquhart, Jr., Raleigh.

I am very grateful to the Board of Directors of the Medical Foundation and to this Development Committee for the commitment to this drive. I and my colleagues will spare no effort — including appropriate efforts through State and Federal governmental agents and benevolent foundations within and beyond the borders of the State — to make it a success. These projects are urgently needed if we are fully to serve the people of North Carolina in these two vital areas, and I invite all alumni to help us with the projects through personal donations, however modest, and



through helping us identify others who may be disposed to assist. Ample materials describing the projects are available from the Alumni Office. Dr. Joseph Pagano, Professor of Medicine and Bacteriology and Immunology and Director of the Cancer Center program, together with his colleagues, has achieved a major Federal Grant. He is available to describe in detail the needs of an adequate facility in which to carry out the Cancer Center's work. Mr. Glenn Wilson, Associate Dean and Director of the AHEC project, is available to provide a detailed description of the needs for a facility to house our Community Health Science faculty and staff. Any ideas or suggestions should be referred to Dr. Sapp, to Mr. Emory Hunt, or to me. We will be most grateful for your support.



Earlybirds

1975 Loyalty Fund

Contributions as of October 25

Note: The following list does not include contributions made by co-founders. These will be included in the final listing, which will appear in the Winter issue.

GRAND TOTAL: \$7,655.00

Top Three Classes

Class of 1956: \$1,175.00

Class of 1955: 805.00

Class of 1942: 500.00

Class of 1915

Cola Castelloe

Clifton F. West, Sr.

Class of 1916

* Claiborne T. Smith

Class of 1917

K. H. Bailey

* Frank B. Marsh

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Russell O. Lyday

R. B. McKnight

Class of 1922

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Augustus S. Rose

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William S. Wall

Class of 1933

* Joseph M. Schachtman

Class of 1934

* A. L. Barringer

R. L. McDonald

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Thomas A. Henson

Class of 1936

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Leo Esbin

Will H. Lassiter

Class of 1938

* Olivia Abernethy

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F. A. Blount

I. F. Nesbitt

G. W. Plonk

Hugh P. Smith, Jr.

Class of 1943 (Dec.)

William H. Merony

Leon W. Robertson

Class of 1944

* Lewis B. MacBrayer

* George A. Smedberg

Class of 1945

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James S. White, Jr.

Class of 1947

C. Roy Rowe, Jr.

Edgar C. Sweeney

Class of 1948

* Verna Y. Barefoot

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James E. Grimes

L. B. Hardison

Vonnie M. Hicks, Jr.

* J. B. Huneycutt

* Benjamin H. Josephson

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Class of 1951

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J. William McCracken

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C. Council Dudley, Jr.

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William D. Huffines

Robert C. Jordan, Jr.

R. L. McKnight

Harold R. Roberts

G. Reginald Tucker, Jr.

W. Wallace White

Class of 1956

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George L. Pittman

* William R. Purcell

* L. S. Woodall

Class of 1957

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Harvey A. Page

* James H. M. Thorp

Benson R. Wilcox

Class of 1958

* Alfred W. Hamer

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Duncan S. Owen, Jr.

Robert F. Sloop

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James H. Blair

John Wells Garden

Walter Ray Samuels

Class of 1962

* Marion W. Griffin

Charles M. Hicks

Class of 1963

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Samuel E. Scott

David R. Williams

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* Walter F. Steele

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Rudolph I. Mintz, Jr.

* Barry M. Welborne

Class of 1968

* Joseph P. Archie, Jr.

James E. Drake

Matthew Friedman

* Terry D. Golden

Frank Charles Tucker, Jr.

Class of 1969

H. Wallace Baird

* Karen C. Sorrels

Class of 1970

Charles E. Crumley

Richard M. Freeman

Donald D. Howe

Thomas A. Roberts, Jr.

Charles Eugene Thompson

Ross L. Vaughan

E. Lance Walker

Class of 1971

John V. Allcott

Major William B. Pittman

Charles H. Richman

Gilbert C. White

Class of 1973

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Donald B. Goodman, Jr.

Ira Greene

Colin D. Jones

Douglas C. Tilt

Class of 1974

* Suzanne VanH. Sauter

Housestaff

A. J. Bambars

* Mark V. Barrow

*Contributed prior to October 1
campaign kickoff.

Editor's Note: The School of Medicine will celebrate its hundredth birthday in 1979, at almost the same time that the School will graduate its 25th class of M.D.'s. The history of the School is comprised of its present and former students and faculty. This piece is about a present member of the faculty who has added and will continue to add substantially to the heritage of the School of Medicine. Written on the occasion of his completing twenty years of service as Chief of the Pulmonary Division of the Department of Medicine, it represents a composite of the views of selected colleagues.



The Indefatigable Dr. Barnett

by Katherine V. Lewis

There is . . . no reason why a doctor who understands the mechanisms of disease cannot at the same time be an understanding doctor nor why a thinking doctor cannot at the same time be thoughtful. Indeed what more effective way to deal with the human reactions to disease than to be armed with knowledge of the disease itself?

— Thomas B. Barnett, M.D.

1961 Whitehead Lecture

Dr. Thomas Buchanan Barnett's career has been marked by a deep commitment to scientifically accurate, humane medical care. Whether teaching students, conducting research, caring for patients, or managing the administrative details of the Pulmonary Division and Gravelly Hospital, his personal involvement is complete.

His crusty nature at times masks his genuine concern for his patients and for the quality of education medical students receive. Yet he has often gone out of his way to review a case he thinks might benefit a student on his service. An alumnus has re-

marked, "He makes medicine seem exciting and interesting. Each patient presents to him not only a diagnostic challenge but also an opportunity to get to know a new person and to form a relationship with another individual."

A man of strong opinions, he always speaks out on behalf of the medical student and house officer's right to receive a quality education. A colleague and former student has described him as "a staunch advocate of the concept that a student's primary function is to learn, that the faculty's responsibility is to teach and that this can be done in the context of excellent patient care, with all other considerations becoming secondary."

However, his opinions are tempered by his thoughtfulness and his innate ability to laugh at himself. Described as "a true, thoughtful liberal" by one of his friends, he approaches most of the issues that confront him in much the same way he views medical education:

I have no formula, no simple guide to medical learning, no new and easy answers to this question. The answer lies first of all in realizing the nature and the magnitude of the challenge. You must recognize your ignorance and be constantly open to its correction. You must develop an aptitude for the systematic acquisition of knowledge, the weighing and evaluation of information, this is the scientific method. Along with all this must come an ability to be discriminating and critical and to distinguish between the valid and the invalid.

He sees it as his responsibility to equip students with the information necessary to make diag-

nostic and therapeutic judgments and to guide them in developing their own methods for acquiring knowledge. He has followed a similar procedure in his own medical career. When the late Dr. Charles Burnett asked him to create the Pulmonary Division in the early fifties, Dr. Barnett considered himself a general internist with an interest in pulmonary diseases — not a pulmonary disease subspecialist. Nevertheless, at the urging of Dr. Burnett and Dean Berryhill, he accepted the position and subsequently became a recognized authority on diseases of the chest.

This intense personal involvement spills over into everything he does — raising horses, working on his house and yard, touring art museums and searching for artifacts in Denmark, fishing, or telling stories about his hometown of Lewisburg, Tennessee. His determination has more than once resulted in his venting his fairly infamous temper. But if the fuse is short and the explosion loud, the resulting smoke clears quickly. He is never known to bear a grudge.

Described by a friend as a man who must be accepted on his own terms, he nevertheless remains reticent about his accomplishments. He is always productive: his publications are noted for their high quality, and he is constantly exploring new research methods in respiratory physiology. His research interests have twice led him from Chapel Hill to the August Krogh Institute of the University of Copenhagen. Neither these accomplishments nor his instrumental role in shaping the Pulmonary Divi-

sion is evident in conversations with him.

Yet, throughout his career as chief of the Pulmonary Division, his clinical capabilities and his high standards of practice have dominated Gravelly Hospital. And they continue to have a profound effect on the teaching programs of the Department of Medicine.

In the early days of the Division, he worked almost single-handedly to recruit a staff, establish the pulmonary laboratory, start the respiratory care unit, and develop rehabilitation programs. Today these programs are strong, and — in addition to faculty, students, and housestaff — the Division supports several postgraduate fellows each year.

His great enthusiasm for teaching and his sense of responsibility, which have been called "never-fatiguing characteristics" by a former student, are evident not only in his daily accomplishments but also in his outlook toward modern medicine:

The point often missed — and in this day and age one of overwhelming importance — is that knowledge and understanding of a biological process which is not obviously and directly useful may be the basis for a whole new area of therapy or a new approach to diagnosis tomorrow. The difficulty of being scornful of knowledge-for-the-sake-of-knowledge is that it is impossible to tell what knowledge is useless.

Who's where

30's

Willis Mitchell, '34, has moved from Dunedin, Florida, to Medford, New Jersey. His address -- 6 Woodmont Court, zip code 08055.

50's

Moke Williams, '51, is now living in Hallandale, Florida. He receives mail at 708 NE Atlantic Shores Boulevard. Zip 33009.

Tyson Jennette, '59, is Second Vice President of the Seaboard Medical Association.

60's

Donn Wells, '61, writes, "I have decided to practice in Hillsborough with Dr. Robert Murphy in Family Practice. My plans for the time being are to live in Chapel Hill . . . I am looking forward to returning to my 'second home.'"

Reginald Mason, '62, has joined the Department of Pathology at Brown University.

Charles Sawyer, '63, has been elected President of the Seaboard Medical Association. He and **John Tayloe**, '60, Fourth Vice President, were installed at the annual convention at Nags Head last summer.

Bill Deal, '63, is an Associate Dean at the University of Florida School of Medicine.

David Gillis, '64, is in Sausalito, California. He lives at 15 Second Street, No. 8. The zip code is 94965.

Craig Roberts, '65, has gone into practice for himself.



His office is at 603 Main Street in Phoenixville, Pennsylvania. Zip 19460.

Bill McLester, '65, and **Wyndell Merritt**, '66, are at the Medical College of Virginia in Richmond. Bill's with the Department of Ophthalmology, and Wyndell's in Plastic and Reconstructive Surgery.

Bernard Credle, '66, is now in Beaufort, South Carolina. He moved there from McLean, Virginia. His address is Star Route 1, Box 286-A. Zip code 29902.

Joseph T. McLamb, '67, has moved from Augusta, Georgia, to Goldsboro. His address: 1701 River Circle "F," zip 27530.

Robert Madry, '67, has a new address: 6618 Clarion, Corpus Christi, Texas 78412.

David Ange, '68, now receives his mail at 824 Westborough Road, Knoxville, Tennessee 37919.

Carole Wilkerson Samuelson, '68, writes, "My husband and I are moving to Birmingham, Alabama, where he will be Associate Professor of Cardiovascular Anesthesia at the University of Alabama and I will be looking for a job in Ambulatory Pediatrics." She and Paul are living at 3982 Spring Valley Road in Birmingham. The zip is 35223.



Robert Martin. '68, is living at 3966 High Summit in Dallas, Texas. The zip code there is 75234.

George Bensch. '68, is in Stockton, California. His mail is delivered at 6958 Allegheny. Zip 95207.

Dick Fleming. '69, has joined the staff of the Mayo Clinic. He is a consultant in the Division of Gastroenterology and an instructor in the Mayo Medi-

cal School. He and Teresa have three children.

Bertram Coffer. '69, has moved to Raleigh. He is living in Wyndfield Estates, Route 1, Box 279-14. The zip is 27609.

Harry Lathan. '69, is practicing in Kinston. He can be reached at 1906 Essex Street, zip 28501.

After a year as Chief Resident in Neurosurgery at NCMH, **Harris Pittman.** '69, is now an

Instructor in Neurosurgery here.

Carl Whiteside. '69, is now in Greensboro. He moved from the Isle of Palms, South Carolina, to 4001 Redberry Drive. The zip, 27407.

70's

Donald Howe. '70, is at the Naval Hospital in Annapolis. He lives at J-1 Perry Circle, zip code 21402. Before going to Anna-

polis, he completed his Ob-Gyn residency in Portsmouth, Virginia.

John E. Hanna, '70, and Vicki Joanne Moore were married October 11 in Laguna Beach, California. They are living at 1603 Robin Lane in Brandon, Florida 33511.

Jerry Bernstein, '70, is in private pediatric practice in Raleigh with **William Hubbard**, '66, and **Wallace Brown**, '71. In August, Jerry was married to Peggy Cox Davidson of Wadesboro. Jerry's address: 3200 Old Wake Forest Road. Zip 27609.

Joseph Harmon, '70, is a Major in the U.S. Army. He is with the Department of Pathology at Lyster Hospital, Fort Rucker, Alabama 36362.

Bill Straughn, '70, has been transferred from Camp Lejeune to California. His address is 540 Kenyon Avenue, Berkeley 94708.

John Surratt, '71, is back in Chapel Hill. He's living at 1939 Fountain Ridge, 27514.

James Henning, '71, writes, "I am currently a medical resident at H. C. Moffitt Hospital and a Robert Wood Johnson Clinical Scholar at the joint University of California-San Francisco/Stanford University Program." Jim, who spent the past two years in the National Health Service Corps, is also doing research in validating experimental recertification/continuing education procedures for practicing internists. His wife, the former Sarah McCorsley of Wilmington, supervises the parasitology Laboratory at the Fort Baker U.S. Army Medical Labs in Sausalito. They live at 10 Marin Avenue in Sausalito. Zip 94965.



Michael Knowles, '71, has recently moved from Durham to Camp Springs, Maryland. He's living at 5623 Lansing Drive. Zip 20031.

Charles Harshaw, '71, is with Physicians Associates at 107 North Murrow Boulevard in Greensboro. He is also co-director of the Critical Care Unit at L. Richardson Hospital. He and Vivian have a daughter.

Ben Goodman, '72, is practicing in Augusta, Georgia. He recently moved there from the Hershey Medical Center. His new address: 3705 Capetown Court, zip 30906.

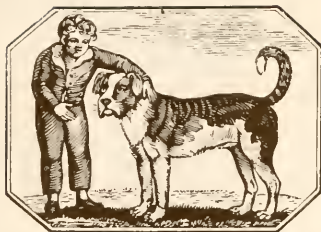
Phil Deaton, '72, writes, "I started the practice of neurosurgery here in Greensboro with Dr. Richard H. Ames back in the middle of July 1975. I just finished my two years active duty with the Navy at the Bethesda Naval Hospital." Phil and Carol have a son, Patrick, 8. His office is located at 1018 Professional Village.

Ann and Selman Welt, '72, have returned to this area from St. Louis. They are living at 3817 Hillgrand Drive in Durham. Zip 27705.

Roddy Drake, '72, is now practicing with **Reggie Tucker**, '55, our Alumni Association President. Their offices are in the Vance Medical Arts Building, Suite A, in Henderson 27536.

Bill Horn, '72, is with the Northwest Children's Clinic in Boone. The clinic is in the Medical Arts Building on Furman Street, Zip 28607. Bill was previously living in Nicholasville, Kentucky.

Bill Simons, '72, has been named the first Bristol Fellow in



Infectious Diseases at the Bowman Gray School of Medicine. Bristol Laboratories initiated the fellowship program to support training for qualified candidates who intend to pursue careers in infectious diseases and immunology.

Tom Irons, '72, is in Germany. His address is 209th General Dispatch, APO New York, New York 09165.

John Bell, '72, writes, "I am currently in the Air Force in Hampton, Virginia. I am presently Chief of the Department of Anesthesiology here at Langley . . . I am looking forward to seeing you at Carolina as soon as possible as the Yankees and Cavaliers make life next to impossible at times around here. Devout Tar Heels are hard to find!" John's mailing address is 202 Antietam Court, Hampton 23669.

Jim Stratton, '73, is now in Brooklyn, New York. He can be reached at 54 State Street. Zip 11201.

Bill Moretez, '74, is at the Health Clinic in Fort Richie, Maryland.

Robert Reddick, '74, is at the National Institutes of Health. His office is in Building 10, Room 2-A29 in Bethesda, Mary-

land 20014.

Jan Postma, Suzanne Sauter, and **Bill Wilson** are all back in Chapel Hill. Jan's living at 303 Brookside Drive, Apt. 3. Suzanne's at 422 Chateau Apartments. And Bill's address is 1340-2 Ephesus Church Road. All three are from the class of '74.

Steve Poliakoff, '75, lives at 121-E Cross Keys Road in Baltimore. The zip code is 21210.

Housestaff

Vernon Hunt and Virgil Wynia are now on the faculty of the Department of Medicine. Both hold the rank of Instructor. Virgil is also Chief Resident.

Where Are They Now?

The following alumni have not been heard from for some time. Do you know where they are? If so, please write us.

W. Gordon Peacock, M.D. '62
T. Ruffin Hood, Jr., M.D. '67
Stephen W. Young, M.D. '68
Edward W. Kouri, M.D. '68
Barry Edward Kahan, M.D. '69
Walter W. Burns, M.D. '69
Steven A. Rubin, Jr., M.D. '70
C. Bryan Koon, Jr., M.D. '70
Alexander R. Kehayes, M.D. '70
James A. Scovil, M.D. '71
L. Morris McEwen, M.D. '71
Michael F. Robinson, M.D. '73
Edward G. Hersh, M.D. '73
G. Griffith Bowen, M.D. '74
Martha F. Goetsch, M.D. '74



New

Medical Practice?

Research or Publication?

Address?

Civic or Professional honor?

Military Assignment?

Family Additions?

Name _____

Preferred Mailing Address _____

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